ZC Vectra Owner's Handbook

ZC VECTRA

Vehicle Identification Certificate

Owner's name

Owner's address

Town State Postcode

Vehicle Identification Number (17 character ISOVIN)

Model name

Registration number Engine number

Odometer reading

Date of purchase

Selling Retailer's Stamp and Signature

Holden Ltd, ABN 84 006 893 232 (hereinafter Holden)

Change of name, address or ownership
In the event of a Safety Recall, or for various reasons, Holden may need to contact you as the owner of this vehicle. Also, if less than three years old, this vehicle will qualify for Roadside Assistance, refer to Chapter 9.

If you have recently changed your address, or name, or purchased this vehicle second-hand, please help us to help you by taking a few minutes to fill in and mail the form on the third page of this handbook. For information about Holden's privacy policy, please visit Holden's website at www.holden.com.au.

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ABN 84 006 893 232.

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We thank you for choosing Holden and want to assure you of our continuing interest in your motoring pleasure and satisfaction and compliment you on your choice.

This handbook applies to all the current Vectra models. Therefore, due to different models and options, you may find reference in this Handbook to some equipment not installed in your vehicle.

Please note that all information, illustrations and specifications in this handbook are based on the latest production information available at the time of printing. Holden reserves the right to make changes at any time without notice and without incurring any obligation.

CHANGE OF ADDRESS OR OWNERSHIP

Please fill in the form below if you have changed your name, address, bought the vehicle second-hand, or have become the new driver.

Holden requires these details in order to contact the operator in the event of a safety recall and to keep the initial 3 year Roadside Assistance details up to date (refer to Chapter 9). For information about Holden's privacy policy, please visit Holden's website at www.holden.com.au .

Please mail to the address on the back of this page.

Please tick the appropriate box:

☐ *Original Owner* ☐ *Subsequent Owner*

Title: (Mr, Mrs, Miss, Ms, etc.)

First name in full or initials

Surname or Name of Company / Institution / Government Department

Address

Street / box

City / Town

State

Postcode

1st contact phone no

2nd contact phone no

Email address

Vehicle registration number

Holden number (if fitted – refer to Chapter 8)

ISOVIN Number (refer to Chapter 8)

Place in an envelope and mail to:

The Manager – Warranty Administration
Service Department
Holden Limited
Box 548D, G.P.O.
Melbourne
Victoria, 3001

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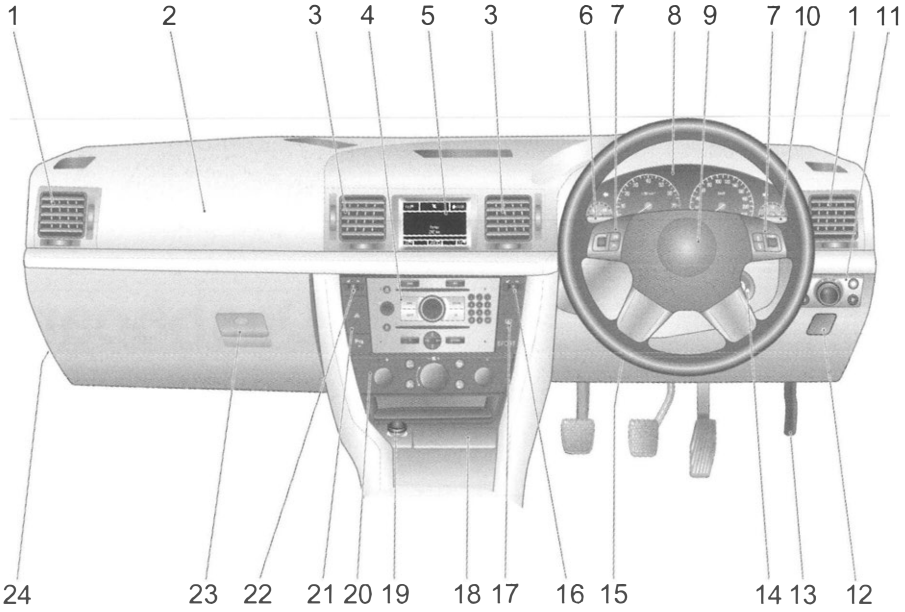
LAYOUT



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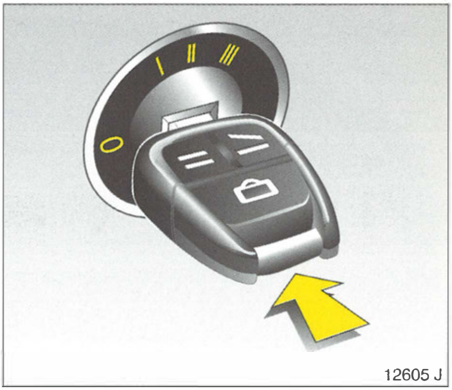
IGNITION SWITCH AND HORN

Ignition switch

- **O** *LOCK: Ignition off. The steering lock is enabled when key is removed.*
- **I** *OFF: Steering unlocked, ignition off.*
- **II** *ON: Ignition on.*
- **III** *START: Start the engine.*



Lock steering column

Withdraw the key in position **O**. *Rotate the steering wheel until the lock engages.*

WARNING:

Do not turn the engine off while the vehicle is moving. Power assisted equipment (such as brakes or steering) which are operated by the engine will be ineffective. Vehicles with a manual transmission: never remove the key while the vehicle is moving, as this will lock the steering wheel. (Vehicles with an automatic transmission have a lock which prevents the key from being removed while driving. Refer to Chapter 4.)

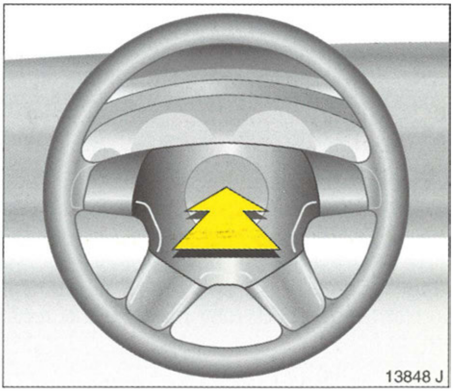
Note: *When you are leaving the vehicle, an audible warning will sound if you have left the headlights on.*

Release steering column lock

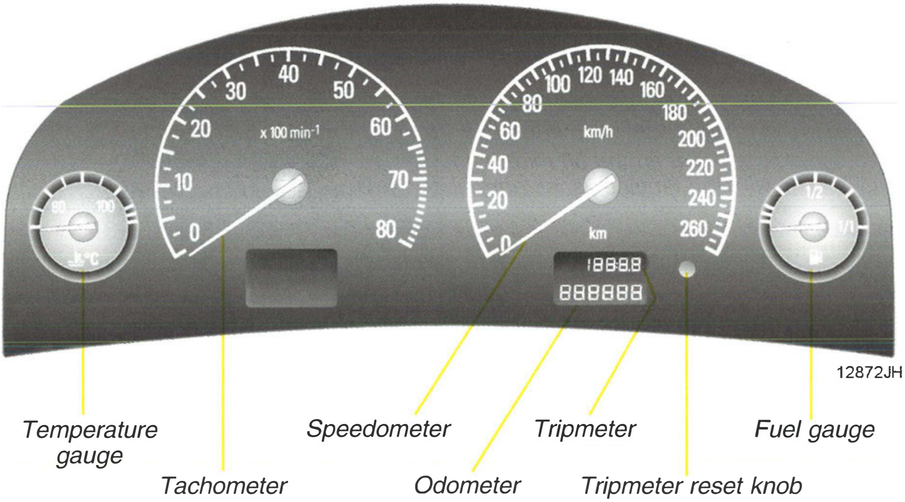
To release the steering column lock, move the steering wheel slightly and turn the key to position **I**.

Horn

Activate the horn by pressing the centre part of the steering wheel.



GAUGES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80
100
120
140
160
80
180
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km/h
200
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220
20
240
260
km
0
18888
888888
80
100
°C
1/2
1/1
12872JH
Temperature gauge
Speedometer
Tripmeter
Fuel gauge
Tachometer
Odometer
Tripmeter reset knob

Tachometer

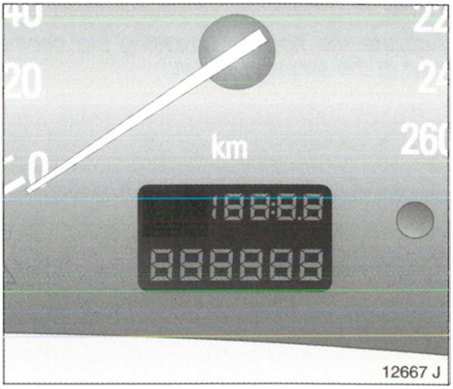
The tachometer indicates the engine speed in revolutions per minute (rpm).

Sustained operation of the engine in the warning zone will cause serious engine damage.

The warning zone is shown here at engine speeds above 6500 rpm.

Speedometer

The speedometer indicates vehicle speed in kilometres per hour (km/h). The window below the speedometer is for the tripmeter and odometer.


20
km
260
18888
888888
12667 J

Tripmeter

The tripmeter (upper reading) records kilometres travelled on a particular trip. To reset the tripmeter, push the reset knob (located to the right of the window) when the ignition is on.

Odometer

The odometer (lower reading) records kilometres travelled since the vehicle was built. The odometer can be displayed (for approximately 15 seconds) when the ignition is off by briefly pushing the reset knob.

GAUGES cont.

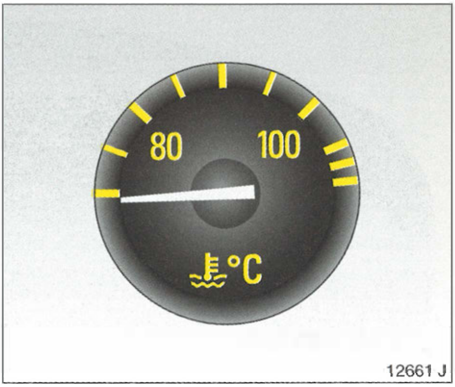
Engine temperature gauge

The temperature gauge indicates the engine coolant temperature.

If the pointer is to the left of the 80 mark, the engine is not yet at operating temperature.

If the pointer is between the 80 mark and the 100 mark, the engine is at normal operating temperature.

If the pointer moves to the right of the 100 mark for more than 30 seconds, the engine temperature is too high. If this occurs, stop the vehicle as soon as it is safe to do so and turn off the engine. Refer to Chapter 6 for further information.



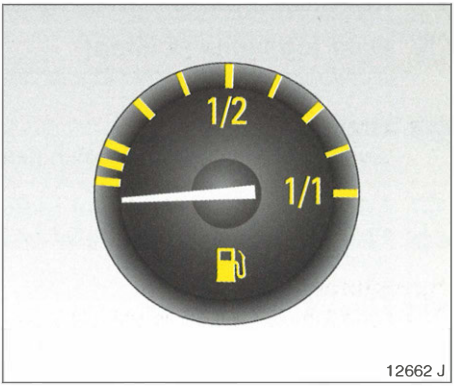
Fuel gauge

Refer to Chapter 8 for the fuel tank capacity.

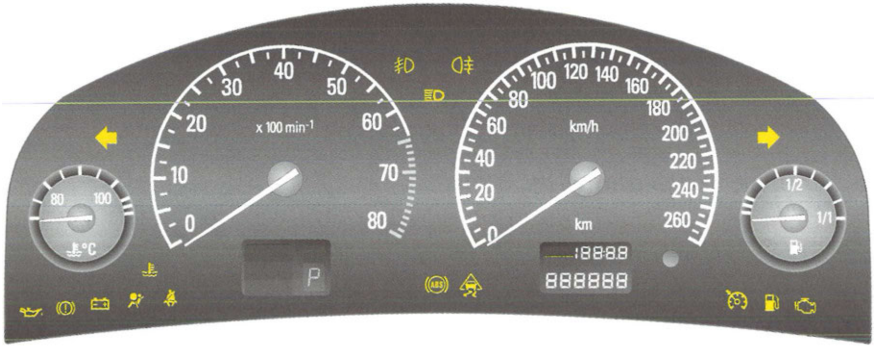
Add fuel to the fuel tank when the gauge indicates low fuel or when the fuel light illuminates.

If the fuel light flashes, fuel should be added to the tank immediately. Refer to Chapter 5.

Note: *Never let the tank become empty; this can cause damage to the exhaust system components.*



WARNING / REMINDER LIGHTS



Front fog lights (if fitted)
Illuminates when the front fog lights are switched on.

Rear fog lights (if fitted)
Illuminates when the rear fog lights are switched on.

High beam
Illuminates when the high beam headlights are switched on or are flashed.

Left and right turn signal indicators
Flash when the turn signal lights are in use. If the light flashes rapidly, a turn signal light bulb may have failed.

Oil pressure
Illuminates when the ignition is switched on and goes out after the engine is started. It can illuminate when idling if the engine is hot, but must go out when engine speed is increased. If this warning light remains illuminated during driving, stop the vehicle as soon as possible and switch off the engine. Do not run the engine when this light remains illuminated. Check the engine oil level. If the oil level is normal, have the system checked at the nearest Holden Retailer.

Brake system and clutch system
Illuminates when the ignition is switched on and the park brake is applied and / or the brake or clutch fluid levels are too low. It goes out after the engine is started.

To check that the bulb is working, ensure that the light illuminates when the park brake is applied and the ignition is on. If it illuminates during driving, ensure the park brake is not applied, stop the vehicle as soon it is safe to do so and have the system checked at a Holden Retailer.

Battery
Illuminates when the ignition is switched on. Goes out when the engine is started. If it illuminates during driving, the battery is not being charged (engine cooling may also be affected). Have the system checked at a Holden Retailer as soon as possible.

WARNING / REMINDER LIGHTS cont.

Airbag and seat belt pretensioners

Illuminates for a few seconds when the ignition is switched on. If it does not go out or if it illuminates during driving, there is a defect in the system. In this condition, the airbag and / or seat belt pretensioners might not function correctly, especially in an accident. Have the system checked at your Holden Retailer as soon as possible. Refer to Chapter 3 (seat belt pretensioners) or Chapter 6 (airbags).

Coolant temperature

If this light illuminates while the engine is running, the coolant temperature is too high. Refer to Chapter 6.

Seat belt

The seat belt warning light flashes when the ignition is switched on unless / until the driver's seat belt is engaged. If the driver's seat belt is not engaged and the vehicle speed exceeds 25 km/h, a warning chime sounds. The warning chime continues to sound for 3 km or until the seat belt is engaged. This is to remind occupants to fasten their seat belts. The chime also sounds once if the driver's seat belt is released before the ignition is turned off.

Anti-lock Brake System (ABS)

Illuminates for a few seconds when the ignition is switched on. If it does not go out or illuminates during driving, a fault has been detected in the ABS. The vehicle brake system remains operational but without ABS assistance. Refer to Chapter 4. Have the system checked at a Holden Retailer as soon as possible.

Traction control

Illuminates for a few seconds when the ignition is switched on. The warning light flashes when the system is controlling wheel spin. Refer to Chapter 4.

Cruise Control

Illuminates when cruise control is activated. Refer to Cruise Control in this chapter.

Low Fuel

Illuminates when the fuel gauge enters the red zone. This light may illuminate slightly earlier when cornering.

Emissions

Illuminates when the ignition is switched on and goes out shortly after the engine starts. Your vehicle is fitted with an emission monitoring system and this warning light indicates when the monitoring system determines that a system service is required.

If the light illuminates when driving, service to the emission system may be required. Although the vehicle may still be drivable and not require towing, have the system checked at your Holden Retailer.

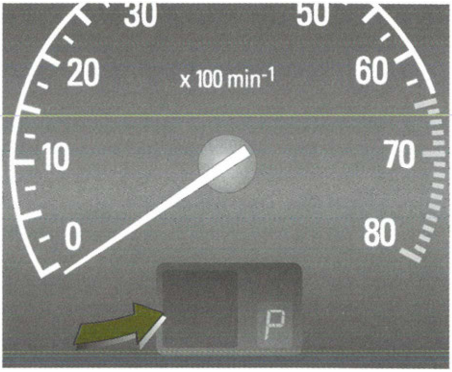
If the light flashes while driving, reduce speed until the light stops flashing and take the vehicle to a Holden Retailer as soon as possible.

WARNING / REMINDER LIGHTS cont.

Tachometer display window

The following warning / reminder lights may appear in the left-hand side of the tachometer display window.

For vehicles with automatic transmission, the right-hand side of this window displays the currently engaged gear.



Immobiliser

Illuminates when the ignition is on, the system does not recognise the ignition key and the engine will not start. Refer to Chapter 2.

Power steering

Illuminates when a fault is detected in the power steering system. Power steering is disabled.

Note: *When power steering is disabled, the vehicle can still be steered but considerable effort is required. Have the system checked at a Holden Retailer.*

Transmission / engine / immobiliser fault control

Illuminates when a fault is detected in the transmission electrics, the engine electrics or the immobiliser. Try eliminating the fault by switching the engine off and then on again. If the fault is not eliminated, have the system checked at a Holden Retailer.

When this light is illuminated, the transmission no longer shifts automatically and gear selection is based on the shift lever position. Refer to Chapter 4.

Driving can be continued as follows:

- **Manual:** *2nd and 5th gear can be selected or depending on the fault, only 5th gear.*
- **Automatic: N**, **R**, **P** *and* **D** *(only 5th gear) can be selected.*

If this light illuminates only briefly, it is of no significance. If it flashes when the ignition is on, a fault has been detected in the immobiliser system. Have the system checked at a Holden Retailer as soon as possible.

Boot lid / tailgate open

Illuminates when the boot lid or tailgate is open.

WARNING / REMINDER LIGHTS cont.

Airbag system, belt tensioners

Illuminates for a few seconds when the ignition is switched on.

A fault has been detected in the airbag or pretensioner system if the light does one of the following:

- *does not illuminate at all*
- *does not go out a few seconds after the ignition is switched on*
- *illuminates when driving.*

Note: *The systems may not be triggered in an accident. Have the system checked at a Holden Retailer.*

Bulb failure

Illuminates when a failed bulb is detected. Check the operation of the lights and replace the failed bulb. Refer to Chapter 6.

Brake lining wear

Illuminates when the engine is running and the front disc pads are worn down to minimum thickness. Have the worn brake pads replaced by your Holden Retailer.

Engine oil level

Illuminates when the oil level is too low. Check and correct the oil level at the next opportunity. Refer to Chapter 7.

Coolant level

Illuminates when the coolant level is too low. Check and correct the coolant level without delay. Refer to Chapter 7.

Service interval

This light illuminates and displays the approximate remaining distance until a system service is required.

When the remaining distance is less than 1500 km and the ignition is on, this light illuminates with a remaining distance of 1000 km displaying.

When the remaining distance is less than 1000 km, this light illuminates for several seconds when the ignition is switched on.

Door open

Illuminates when a door or the boot lid is open.

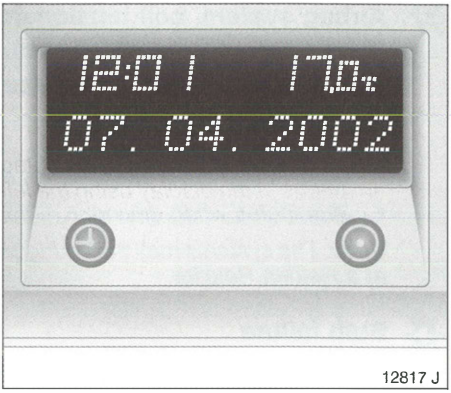
TRIPLE-INFORMATION DISPLAY (if fitted)

The time and outside temperature are displayed when the ignition is on. With the radio switched on, the radio frequency is displayed in place of the date.

When the ignition is off, the time, date and outside temperature can be displayed for approximately 15 seconds by briefly pressing either ◴ or ⊙.

The brightness of the display can be adjusted when the park lights or headlights are on. Refer to Light Switches, in this chapter.

The display of --.-°C (or --.-°F) indicates a fault. Have your Holden Retailer check this function.



12817 J

Setting the date and time

To adjust the date and time, turn on the ignition and switch off the radio.

Press the ◴ or ⊙ button as follows:

◴ *(Press for approximately 2 seconds.) The day setting flashes.*

⊙ *Repeat until the day setting is correct.*

◴ *The month setting flashes.*

⊙ *Repeat until the month setting is correct.*

◴ *The year setting flashes.*

⊙ *Repeat until the year setting is correct.*

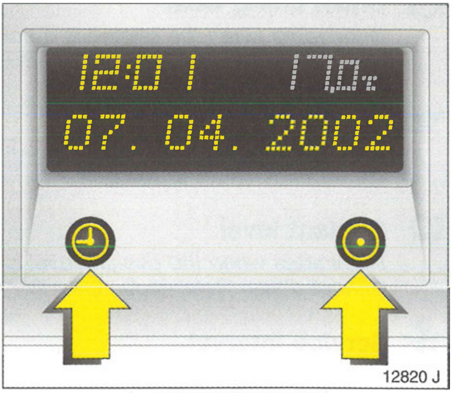
◴ *The hour setting flashes.*

⊙ *Repeat until the hour setting is correct.*

◴ *The minute setting flashes.*

⊙ *Repeat until the minute setting is correct.*

◴ *The clock starts at 0 seconds.*



12820 J

If setting only the time, press ◴ for approximately 2 seconds then repeat pressing ◴ until the hours or minutes setting flashes. Adjust as outlined above.

Outside temperature

A fall in temperature is indicated immediately, but a rise in temperature is indicated after a time delay.

WARNING:

The road surface may already be icy even though the display indicates a temperature above 0°C.

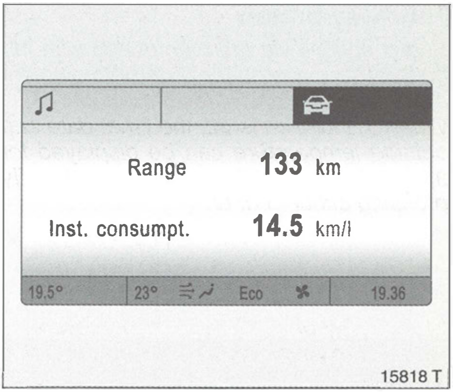
MULTI-INFORMATION DISPLAY (if fitted)

Multi-information display

Functions and settings of some equipment can be accessed via the multi-information display.

These functions are marked / executed from the menus in the display using the left adjuster wheel on the steering wheel, the multi-function button on the infotainment system or the four-way button on the infotainment system.

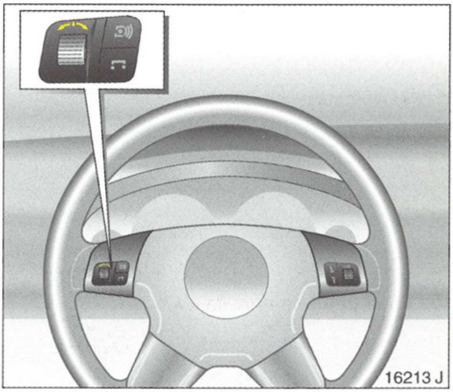
When the park lights or headlights are switched on, you can adjust the brightness of the display by using the button to the right of the headlight switch.


Range 133 km
Inst. consumpt. 14.5 km/l
19.5°
23°
Eco
19.36
15818 T

Left adjuster wheel

To select using the left adjuster wheel on the steering wheel:

Turn up	*Previous menu item.*
Turn down	*Next menu item*
Press	*Select marked item, confirm command.*

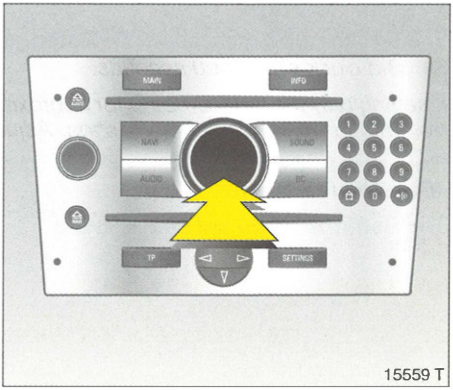


Multi-function button

To select using the multi-function button:

Turn	*Mark menu options, functions or commands.*
Press	*Select marked item, confirm command.*

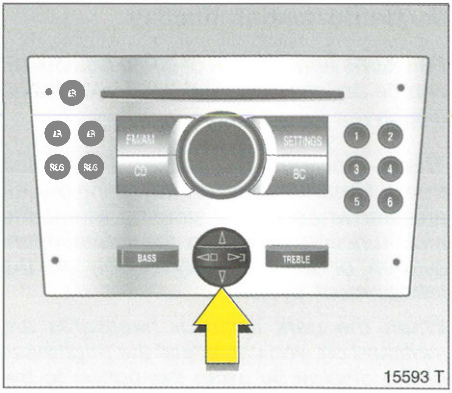
To exit a menu, turn the multi-function button left or right to **Return** *or* **Main** *and then select by pressing it.*


MAIN
INFO
NAVI
SOUND
AUDIO
BC
TP
SETTINGS
1
2
3
4
5
6
7
8
9
0
15559 T

MULTI-INFORMATION DISPLAY (if fitted) cont.

Four-way button

Select options via the menus and with the buttons/four-way button on the infotainment system.


FM/AM
CD
SETTINGS
BC
1
2
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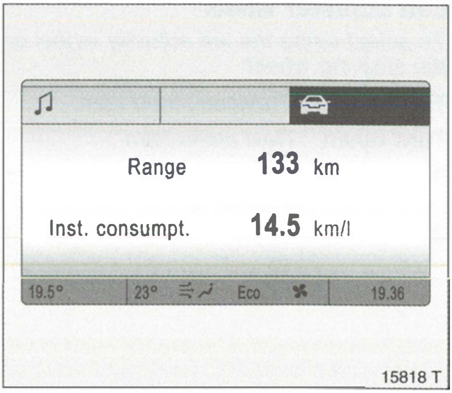
4
5
6
REG
REG
BASS
TREBLE
15593 T

Menus and displays

Some menus and displays can be accessed by selecting the function from the top row of the display.



Range 133 km

Inst. consumpt. 14.5 km/l

19.5° 23° Eco 19.36

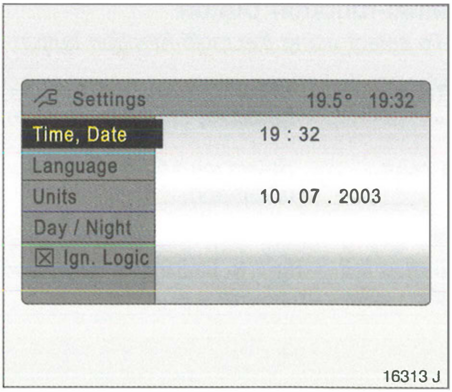
System settings

The settings are accessed via the **Settings** *menu.*

Press the **Main** *button (if fitted) on the infotainment system (call up main display).*

Press the **Settings** *button on the infotainment system.*

The **Settings** *menu will be displayed.*



Settings 19.5° 19:32

Time, Date 19 : 32

10 . 07 . 2003

Language
Units
Day / Night
☒ Ign. Logic
16313 J

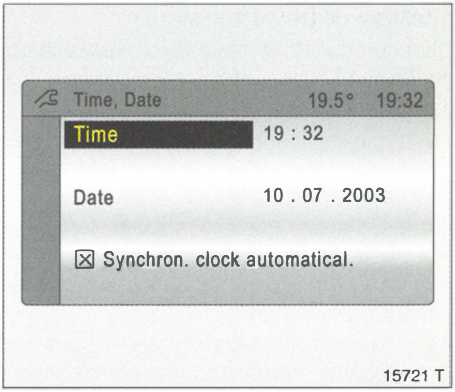
MULTI-INFORMATION DISPLAY (if fitted) cont.

Setting date and time

Select **Time, Date** *from the* **Settings** *menu.*

The menu for **Time, Date** *will be displayed.*

Select the menu items required.


Time, Date 19.5° 19:32

Time 19 : 32

Date 10 . 07 . 2003

☒ Synchron. clock automatical.

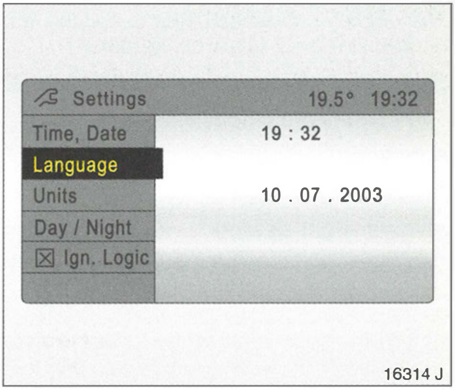
15721 T

Language selection

You can select the display language for some functions.

Select **Language** *from the* **Settings** *menu.*

The available languages are displayed.

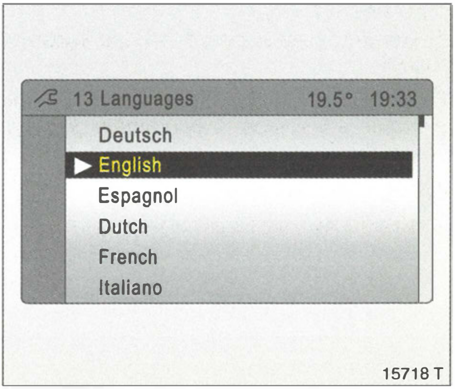

Settings 19.5° 19:32
Time, Date
Language
Units
Day / Night
☒ Ign. Logic
19 : 32
10 . 07 . 2003

16314 J

Select the desired language.

Selections are indicated by a ▶ in front of the menu item.

In systems with language version (if fitted), when the language setting of the display is changed, the system will ask if the message language should also be changed. Refer to the infotainment system instructions.


13 Languages 19.5° 19:33
Deutsch
▶ English
Espagnol
Dutch
French
Italiano

15718 T

MULTI-INFORMATION DISPLAY (if fitted) cont.

Setting units of measure

You can select which units of measure are to be used.

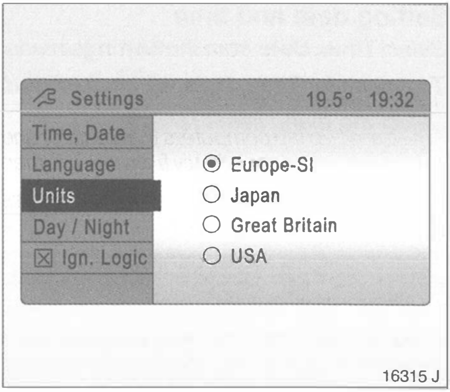
Select **Units** *from the* **Settings** *menu.*

The available units are displayed.

Select the desired unit.

Selections are indicated by a ● in front of the menu item.

For Australia/New Zealand, select the "Europe-SI" option.


Settings
19.5° 19:32
Time, Date
Language
Units
Day / Night
☒ Ign. Logic
◉ Europe-SI
○ Japan
○ Great Britain
○ USA
16315 J

Setting display mode

The display can be adjusted to suit the light conditions, black text on a light background or light text on a black background.

Select **Day / Night** *from the* **Settings** *menu.*

The options are displayed.

Automatic	*Adaptive based on vehicle lighting.*
Always day design	*Black text on a light background.*
Always night design	*Light text on a black background.*

Selections are indicated by a ● in front of the menu item.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer

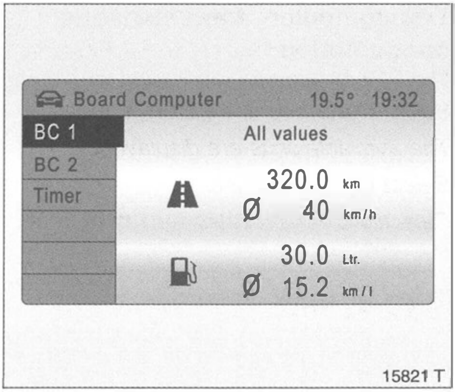
The trip computer provides information on driving data, which is continually registered and evaluated electronically.

There are two trip computers that register and evaluate date independently from one another.

To display trip computer driving data, press the **BC** *button on the infotainment system and select the trip computer function in the display or press the left adjuster wheel on the steering wheel.*

The **Board Computer** *menu is opened and 'Range' and 'Instantaneous consumption' are displayed.*

Some of the functions appear on the display in an abbreviated form.



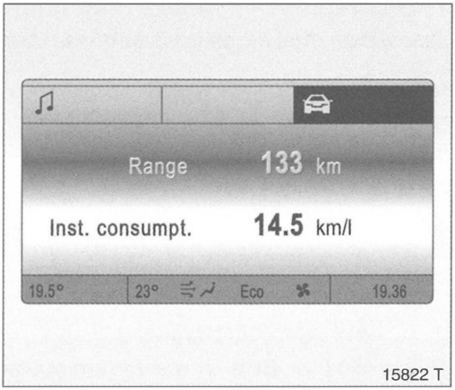
320.0 km
Ø 40 km/h
30.0 Ltr.
Ø 15.2 km/l

15821 T

Trip computer - range

Range is calculated from the current fuel tank content and instantaneous consumption. The display shows average values.

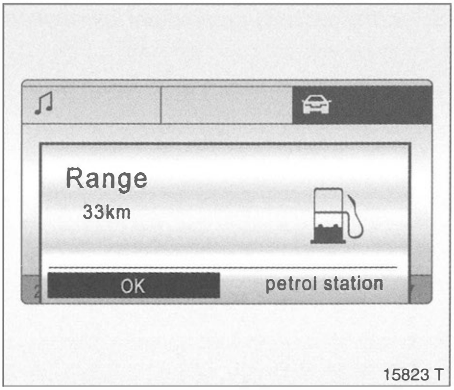
After refuelling, the vehicle updates the range automatically after a brief delay.


Range 133 km

Inst. consumpt. 14.5 km/l

15822 T

If the fuel in the tank will allow less than 50km, a warning 'Range' appears on the display.


Range
33km

15823 T

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer - instantaneous consumption

The display changes depending on speed:

Display in l/h	*below 13km/h*
Display in l/100km	*above 13km/h*

Trip computer - distance travelled

Displays the number of kilometres driven. Measurement can be restarted at any time.

Trip computer - average speed

Average speed calculation. Measurement can be restarted at any time. Time spent in the journey with the ignition off is not included in the calculation.

Trip computer - effective consumption

Displays the amount of fuel consumed. Measurement can be reset at any time.

Trip computer - average consumption

Calculation of average consumption. Measurement can be restarted at any time.

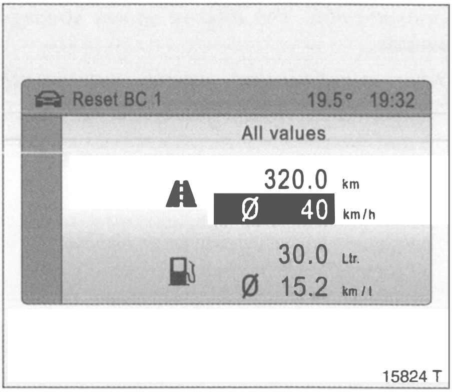
Resetting trip computer information

The following trip computer information can be reset (restart measurements):

- *Distance travelled*
- *Average speed*
- *Effective consumption*
- *Average consumption*

Select **BC1** *or* **BC2** *in the trip computer menu.*

Select the desired trip computer information.



Reset BC 1 19.5° 19:32
All values
320.0 km
Ø 40 km/h
30.0 Ltr.
Ø 15.2 km/l

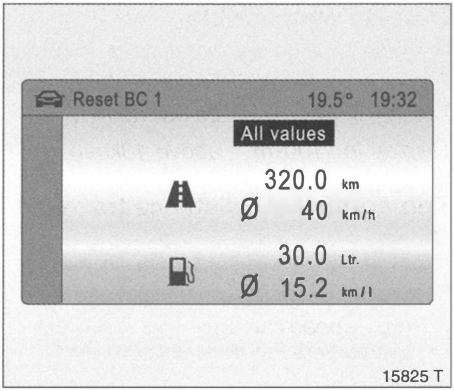
15824 T

MULTI-INFORMATION DISPLAY (if fitted) cont.

The value for the selected function will be reset and recalculated.

Select **All values** *to reset all information in the trip computer.*

After resetting, '---' is displayed with the trip computer information selected. The recalculated values are displayed after a brief delay.


Reset BC 1
19.5° 19:32
All values
320.0 km
Ø 40 km/h
30.0 Ltr.
Ø 15.2 km/l

15825 T

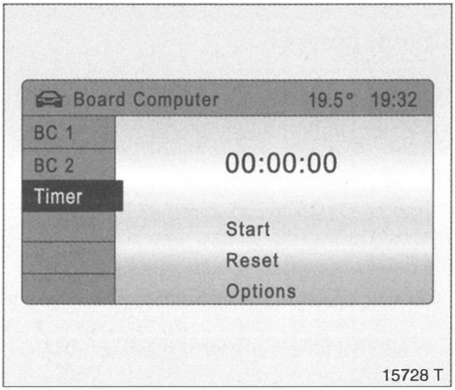
Stop watch

Select **Timer** *from the* **Board Computer** *menu.*

The **Timer** *menu will be displayed.*

Start the stop watch by selecting **Start***.*

Reset the stop watch by selecting **Reset***.*


Board Computer
19.5° 19:32
BC 1
BC 2
Timer
00:00:00
Start
Reset
Options

15728 T

Stop watch options

Different stop watch options can be accessed in the **Options** *menu.*

Driving time excluding stationary time
The time the vehicle is in motion is recorded. Stationary time is not recorded.

Driving time including stationary time
The time the vehicle is in motion is recorded. The time the vehicle is stationary with the key in the ignition is included.

Travel time
The time between manual activation via **Start** *and deactivation via* **Reset** *is recorded.*

MULTI-INFORMATION DISPLAY (if fitted) cont.

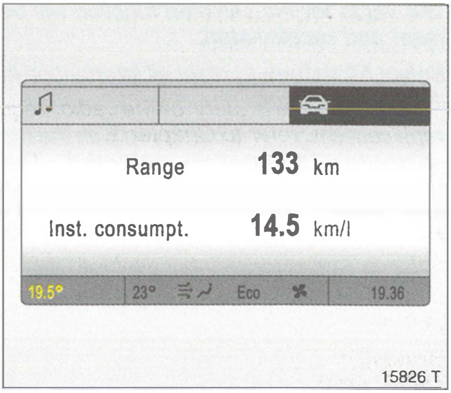
Outside temperature

A fall in outside temperature is indicated immediately and a rise in temperature after a time delay.

A warning message is shown in the display as a warning for icy road surfaces. There is no message below -5°C.

WARNING:

The road surface may already be icy even though the display indicates a few degrees above 0°C.



Range 133 km

Inst. consumpt. 14.5 km/l

Check control

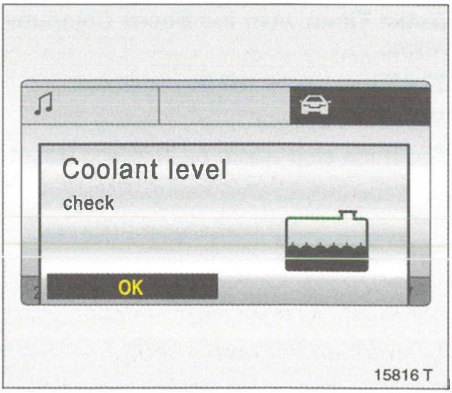
Check control monitors several fluid levels, the remote control batteries, and important external lights, including cables and fuses. When towing, trailer lighting is also monitored.

Once the ignition has been switched on, all check control functions are automatically verified.

Warning messages appear on the display. If there are several warning messages, they are displayed one after the other.

Some of the warning messages appear on the display in abbreviated form.

If check control issues a warning message, the display is blocked from other functions. Acknowledge the message by pressing the multi-function button. If there are several warning messages, acknowledge them one at a time.



Coolant level

check

MULTI-INFORMATION DISPLAY (if fitted) cont.

Warning messages

**Remote Control Battery
check**

Displayed if the battery of the radio frequency remote control is too low. For battery replacement, refer to Chapter 2.

**Brakelight switch
check**

Fault. The brake light does not come on when brake is applied. Have cause of fault remedied immediately. Consult your Holden Dealer.

If there is a fault in the lighting system, the respective location of the fault is displayed as text, e.g.:

**Brakelight
check right**

For bulb replacement, refer to Chapter 6. If a brake light is defective, the relevant tail light takes over the brake light function.

Brake Pad

The front disc brake pads are worn down to the minimum thickness. Consult your Holden Dealer to have the brake pads replaced.

**Wash Fluid Level
check**

Fluid in the windscreen wash system is too low. Top up wash fluid, refer to Chapter 7.

The rear window wash system is deactivated if the wash fluid level is too low.

**Coolant level
check**

The fluid level in the engine cooling system is low. Check the coolant level immediately.

Interruption of power supply

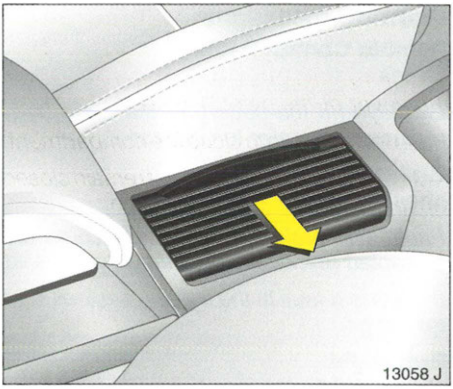
Check control automatically checks all functions after the battery has been reconnected or changed. Stored warning messages appear on the display one after the other.

CUP HOLDERS

Cup holder – front

The front cup holder is located in the centre console between the front seats.

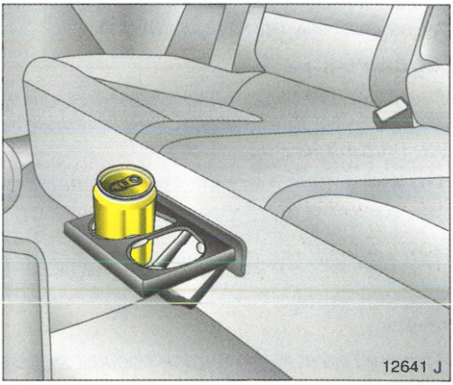
Access the cup holder by sliding the cover open as illustrated.



Cup holder – rear (if fitted)

The rear cup holder is located at the front of the centre rear seat cushion, as illustrated.

Access the rear cup holder by pressing the front edge.



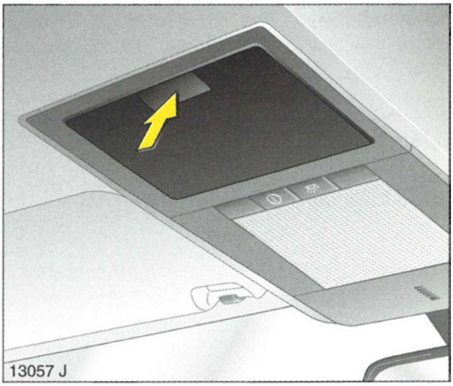
STORAGE COMPARTMENTS

Overhead sunglasses compartment (if fitted)

To open the sunglasses compartment, press the cover at the point illustrated.

Push the cover up to close the compartment.

Note: *This compartment must remain closed while the vehicle is being driven.*

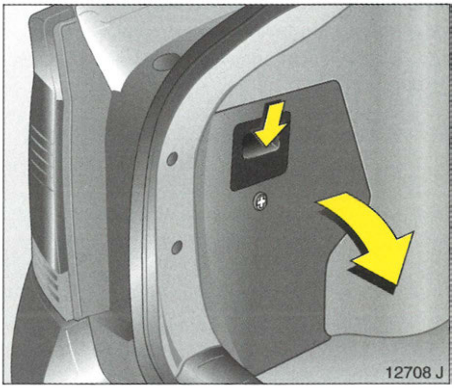

13057 J

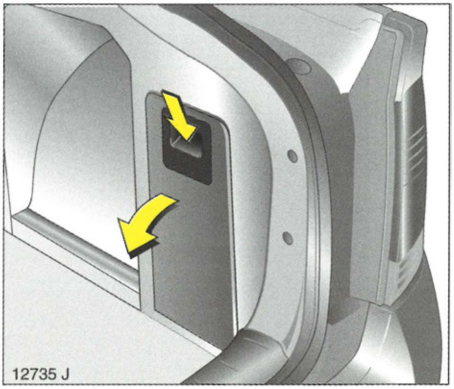
Storage compartments in the luggage area

There are two compartments in the luggage area; one on the left-hand side and one on the right-hand side.

To open a compartment, push the bar in the recess and lift the cover out.

Note: *Do not cover the air outlets when storing items in these compartments. Refer to Ventilation in this chapter.*


12708 J


12735 J

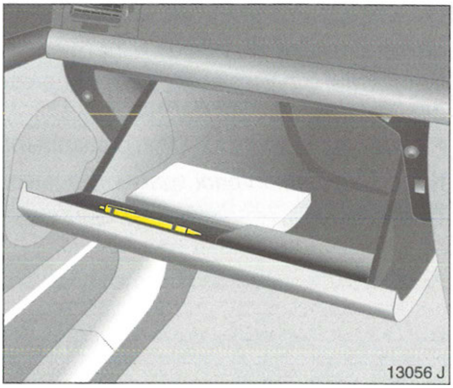
STORAGE COMPARTMENTS cont.

Glovebox

To open the glovebox lid, lift the handle upwards. The glovebox lamp illuminates when the lid is open.

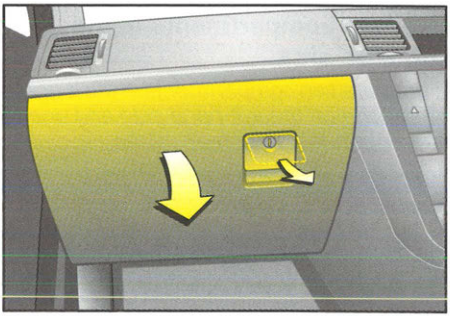
There is a pen holder at the front of the lid, as illustrated.

Press the lid to close the glovebox.



Glovebox lock (if fitted)

To lock the glovebox, turn the key clockwise. To unlock the glovebox, turn the key anticlockwise.



Seat-back pockets (if fitted)

Seat-back pockets are located at the back of the front seats.

Front seat armrest

Refer to Chapter 3.

LIGHT SWITCHES

Light switch

Rotate the light switch dial to the required light setting:

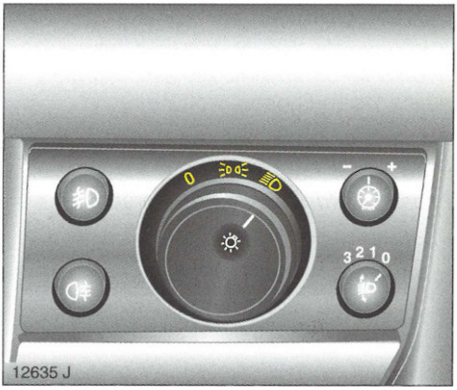
0 *Off*

≡DO≡ *Park lights*

≡D *Headlights and park lights.*

The tail lights and number plate lights also illuminate when ≡DO≡ *or* ≡D *is selected.*

Leaving the lights on when the engine is not running drains the battery power. To remind you to switch off the lights, a warning chime sounds when the driver's door is opened and the lights are switched on.

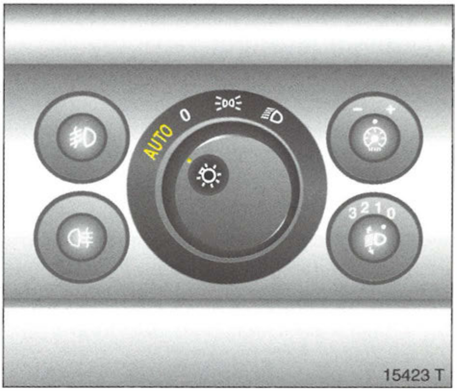


Automatic Light Control (if fitted)

Rotate the light switch dial to the required light setting:

0	*Off*
≡DO≡	*Park lights*
≡D	*Headlights and park lights.*
AUTO	*Automatic low beam activation*

To turn on automatic light control, rotate the light switch to **AUTO.** *Depending on the external light conditions, the low beam headlights will switch on automatically when the engine is running. The headlights are turned off when the ignition key is removed.*

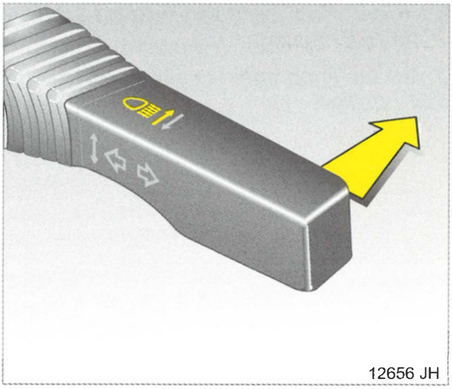


High / low beam

While the headlights are switched on, push the lever away from you then release it. The headlights change from low beam to high beam.

Repeat this action to return the lights from high beam to low beam.

When high beam is selected, the ≡D *light illuminates in the instrument panel. Refer to Warning / Reminder Lights in this chapter.*

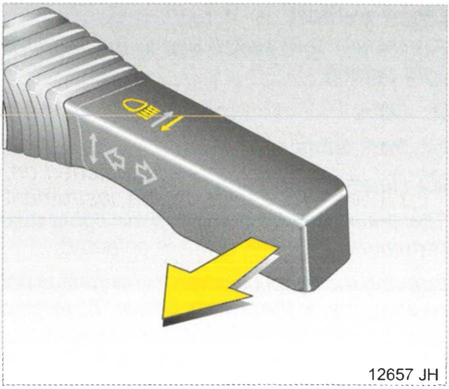


LIGHT SWITCHES cont.

Headlight flash

It is possible to flash the high beam lights even if the headlights are off.

Pull the lever towards you. The high beam headlights will remain illuminated as long as the lever is held in this position.



Headlight levelling

Correct adjustment of the headlight level reduces dazzle for other road users. To adjust the headlights to suit the load in the vehicle, use the adjustment knob, located at the bottom right of the light switch dial.

Press the headlight adjustment knob; it will pop out to enable adjustment of the setting. Set the level based on luggage and occupants, as follows:

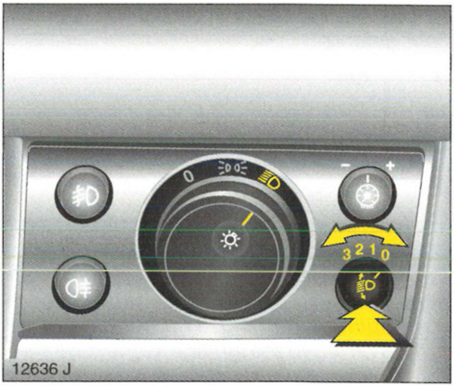
3 *Driver's seat occupied and load in the luggage compartment.*

2 *All seats occupied and load in the luggage compartment.*

1 *All seats occupied with no luggage load.*

0 *Front seats occupied with no luggage load.*

Press the knob again to set it back into its rest position.



LIGHT SWITCHES cont.

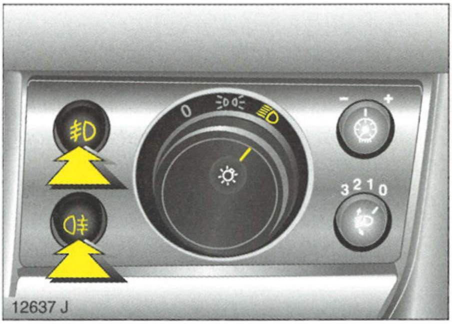
Fog lights (if fitted)

FRONT

With the ignition on and the park lights on, press the ‡D button to toggle the front fog lights on and off.

When the front fog lights are switched on, the ‡D light illuminates in the instrument panel. Refer to Warning / Reminder Lights in this chapter.

Check your state laws regarding the use of fog lights when driving.



12637 J

REAR

With the ignition on and the headlights on, press the r button to toggle the rear fog lights on and off.

When the rear fog lights are switched on, the O‡ light illuminates in the instrument panel. Refer to Warning / Reminder Lights in this chapter.

To avoid dazzling the driver behind you, use the rear fog lights only when fog is very heavy.

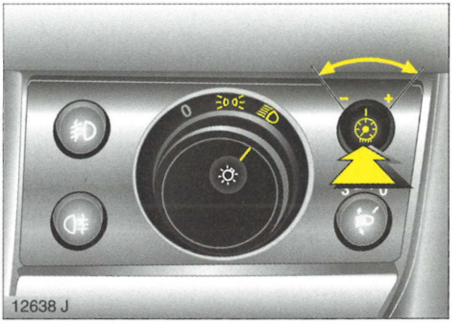
Instrument panel illumination

The instrument panel and information display window are illuminated when the park lights are switched on.

Press the ⏲ adjustment knob; it will pop out to enable adjustment.

Turn the knob to set the desired level of brightness.

Press the adjustment knob again when finished.



12638 J

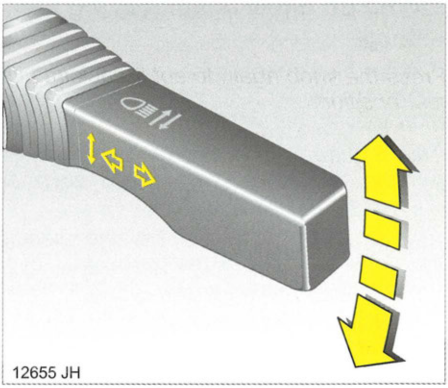
Turn signals

To signal a turn, move the lever in the direction that you intend turning the steering wheel. The lever returns to its original position when released and the selected turn signal is activated.

When the steering wheel returns to the 'straight-ahead' position, the turn signal cancels.

In some turns, such as changing lanes, the steering wheel is not turned enough to cancel the turn signal. In this case, move the lever part way (to the point where resistance is felt) and release it.

The turn signals flash for three cycles.



12655 JH

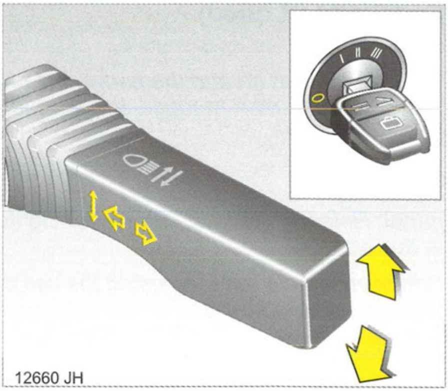
LIGHT SWITCHES cont.

Turn signals for parking

The turn signal lights on one side of the vehicle can be illuminated when parking, as follows:

1. *Turn the ignition key to position* **0**.
2. *Turn the light switch to position* **0**.
3. *Remove the ignition key.*
4. *Move the turn signal lever fully up or down to select the appropriate lights.*

To confirm that this feature has been set, a warning chime sounds until the driver's door is closed. The courtesy light illuminates briefly and the selected turn signal lights (front and rear) illuminate.



12660 JH

The lights turn off when the ignition is next switched on.

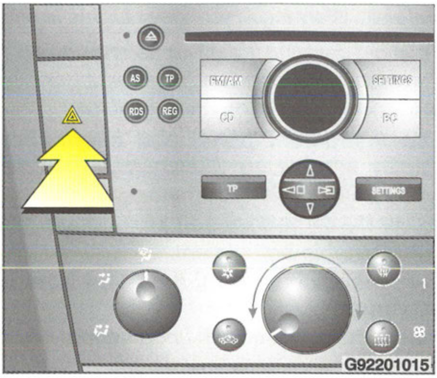
Hazard switch

Press the ⚠ *button to toggle the hazard lights on and off.*

If your vehicle becomes a traffic hazard, use the hazard lights (day or night) to warn other road users.

When the hazard lights are on, ⚠ *light in the hazard switch flashes in unison with the turn signal lights.*

Note: *Use of the hazard lights while the vehicle is moving is illegal in some states.*



G92201015

Interior lights

Refer to Chapter 3.

Lights off delay when leaving the vehicle

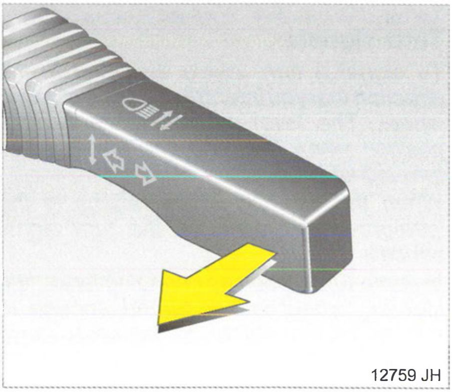
The low beam headlights and the reversing lights can be set to turn on for 30 seconds after leaving the vehicle.

This feature is of particular benefit when parking in unlit parking areas such as driveways and garages.

After removing the ignition key and opening the driver's door, pull the turn signal lever towards the steering wheel, as illustrated.

Cancel this feature by inserting the key into the ignition.

Note: *If the driver's door is left open, the lights will go out after two minutes.*



12759 JH

WIPERS AND WASHERS

Front windscreen wipers

Move the lever upwards to turn the windscreen wipers on or to select the next higher wiper speed. Alternatively, hold the lever up (against resistance) until the desired speed is selected.

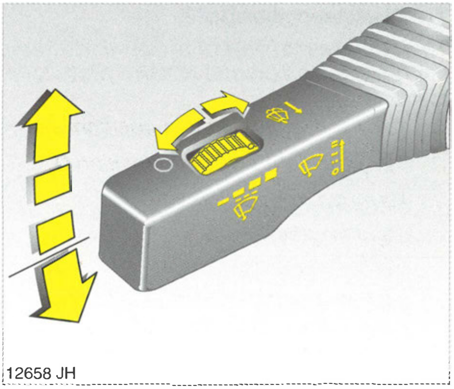
═ *Fast*

— *Slow*

-- *Intermittent*

O *Off*

Move the lever downwards to select a lower wiper speed. Alternatively, hold the lever down (against resistance) until the desired speed is attained or to turn the wipers off.


12658 JH

The lever returns to the rest position when it is released and the wiper speed is set.

INTERMITTENT

To adjust the interval of the intermittent wiper, turn the thumb wheel located on the top of the lever. For shorter intervals, turn the thumb wheel to the right. For longer intervals, turn the thumb wheel to the left.

SINGLE WIPER SWEEP

When the wipers are turned off, push the lever downwards to activate a single sweep.

Automatic rain sensitive windscreen wipers (if fitted)

Gently tap the lever upward to activate the automatic rain sensor windscreen wipers.

-- *Automatic wiping with rain sensor*

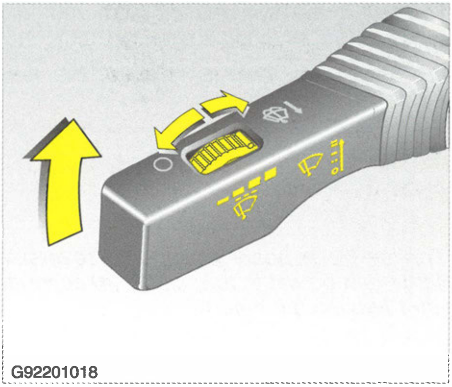
To switch off the automatic rain sensor wipers, move the lever downwards.

The rain sensor detects the amount of water on the windscreen and automatically regulates the speed of the windscreen wipers.

The sensitivity of the system can be adjusted using the thumb wheel located on the top of the lever.

To make the sensor system less sensitive, turn the thumb wheel to the left.

To make the sensor system more sensitive, turn the thumb wheel to the right.


G92201018

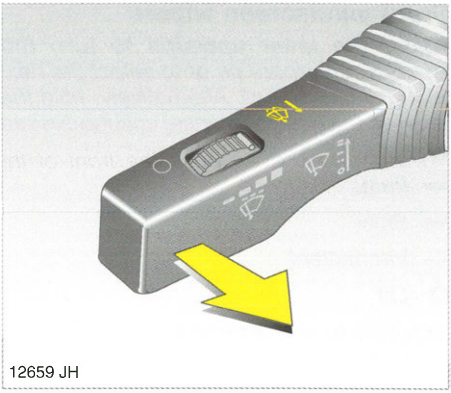
WIPERS AND WASHERS cont.

Windscreen washer

To spray washer fluid onto the windscreen, turn the ignition on and pull the wiper lever towards you.

As the washer fluid is sprayed, the wipers operate for several sweeps.

Note: *Never operate the wipers on dry glass as this can damage the rubber and scratch the glass.*


12659 JH

Rear wiper / washer (if fitted)

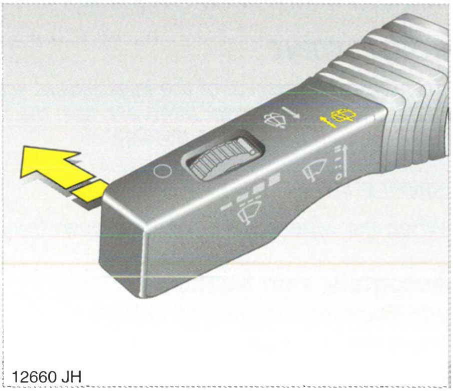
To turn on the rear wiper, push the lever forward. The lever returns to its rest position when it is released, even though the wiper setting has been adjusted.

The rear wiper sweeps in timed interval mode.

To turn off the rear wiper, again push the lever forward.

To operate the rear washer, push and hold the lever for as long as required.

As the washer fluid is sprayed, the rear wiper operates.


12660 JH

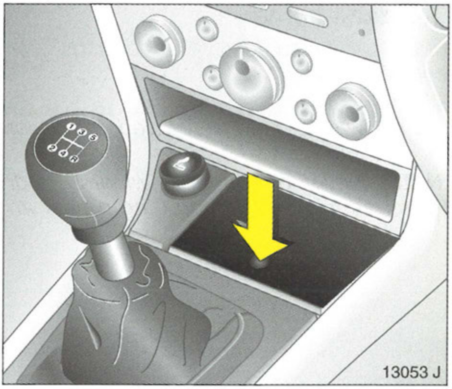
ASHTRAYS

Ashtrays

Use ashtrays for ash only; not combustible rubbish.

Front ashtray

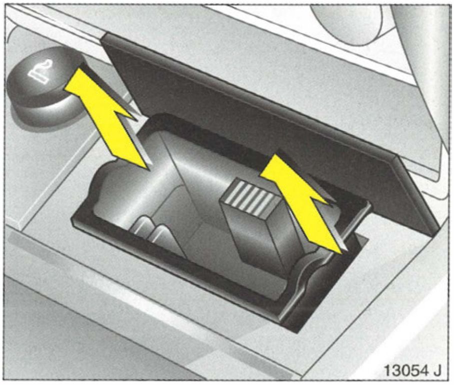
To open the cover, push the front of the cover as illustrated.



13053 J

To empty the front ashtray, grasp the inner container on both sides and lift it out as illustrated.

Empty the ashtray and push it back into place. Press the lid to close it.



13054 J

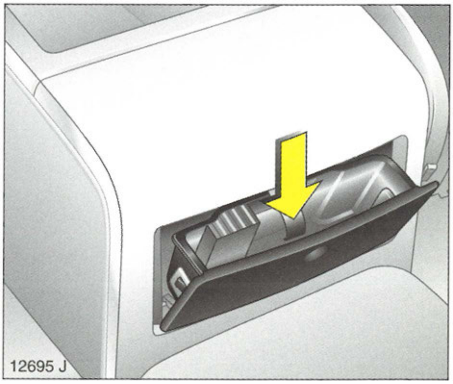
Rear ashtray

The rear ashtray is located in the rear centre console.

To open the rear ashtray, press the ashtray door.

To empty the ashtray, push the spring as illustrated, and lift the ashtray out.

Empty the ashtray and push it back into place. Press the door to close it.



12695 J

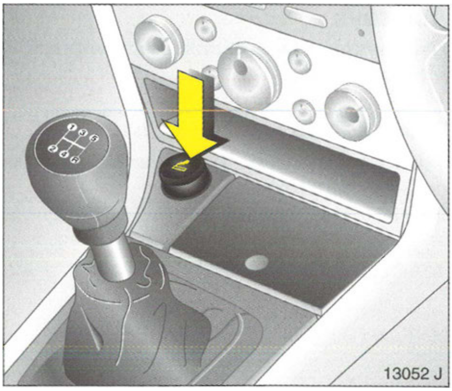
CIGARETTE LIGHTER

Cigarette lighter

The cigarette lighter is located in the front centre console.

To operate the lighter, turn the ignition on and press the lighter down into its recess.

When the element is hot, the lighter pops out ready for use.



VENTILATION

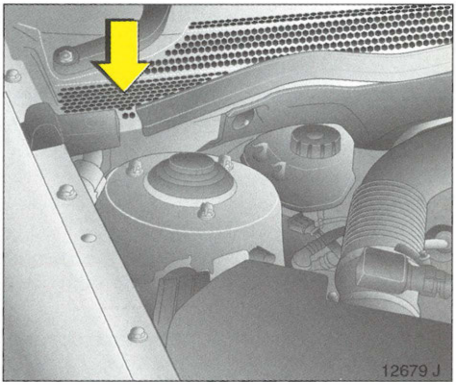
Your vehicle features a flow through ventilation system, so under reasonable conditions it should be unnecessary to open the windows. This features an air mixture system: by mixing cold and hot air, the temperature can be regulated without delay and held practically constant at all air speeds.

For information specific to the climate control system, refer to Climate Control in this chapter.

Air intake

Outside air is drawn into the vehicle through the opening at the base of the windscreen.

Do not allow this opening to become clogged with debris, such as leaves, dirt or snow.



Pollen filter

The pollen filter is located in the air intake vent. The filter removes dust, soot, pollen and spores from the in-flowing outside air.

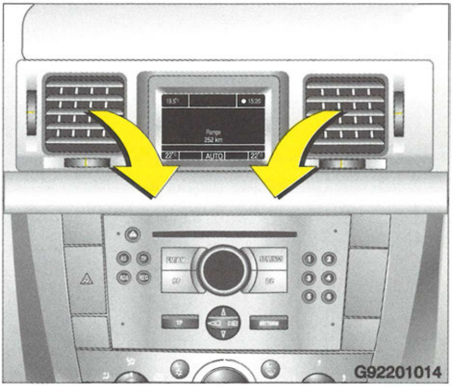
The activated charcoal coating largely eliminates odours and polluting environmental gases from the air.

Note: *The filter must be replaced at the intervals specified in the Maintenance Schedule. Refer to Chapter 12.*

Centre air vents

The centre vents supply air to the head area. Direct the air flow to the left or right by adjusting the horizontal wheel.

To open the vent, turn the vertical adjuster wheel upwards. Adjust the air flow up or down using the same adjuster wheel. To close the vent, turn the vertical adjuster wheel fully downwards.



Windscreen demist vents

Vents across the front of the dashboard direct air flow upwards from the base of the windscreen.

These vents are not adjustable.

Front foot vents

Vents in the footwell direct air flow downwards to the feet.

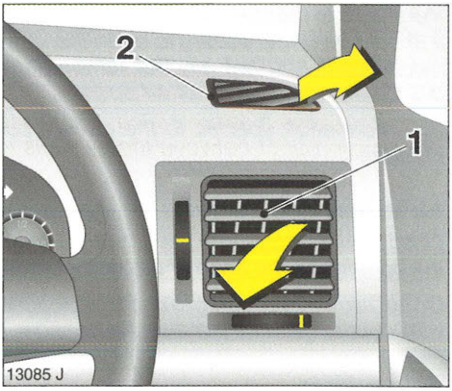
These vents are not adjustable.

VENTILATION cont.

Side air vents (1)

Direct the air flow to the left or right by adjusting the horizontal wheel.

To open the vent, turn the vertical adjuster wheel upwards. Adjust the air flow up or down using the same adjuster wheel. To close the vent, turn the vertical adjuster wheel fully downwards.



Side demist vents (2)

The side demist vents direct air flow to the sides of the windscreen and to the side windows.

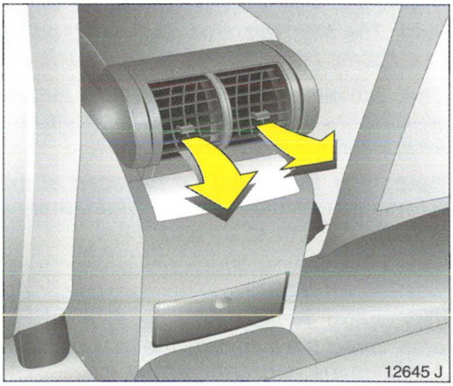
These vents are not adjustable.

Rear console vents

The rear console vents direct air flow towards the rear seats when the front face level vents are selected.

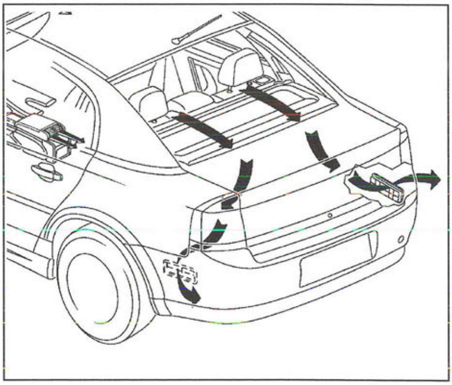
To open the vents, turn the vertical adjuster wheel upwards. To close the vents, turn the vertical adjuster wheel fully downwards.

Direct the air flow up, down, left and right by tilting and swivelling the vent fins.



Luggage area air escape outlet

Do not block the air escape outlets when storing items in the luggage area storage compartments.



VENTILATION AND HEATING CONTROLS

For information relating to heating within the climate control system, refer to Climate Control in this chapter.

Vent dial

The vent dial is a rotary switch. Set this to any position at or between the symbols to select air flow distribution.

Open the vents to allow air flow when selecting ↕⇉ or ⇉ .

↕⇉ *Centre vents and foot vents (front and rear).*

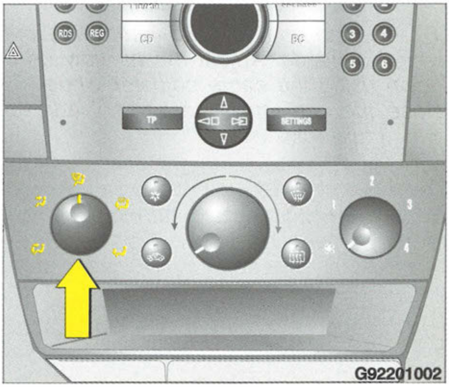
⇉ *Face level vents and rear console vents.*

⊞ *Windscreen and side demist vents.*

↓⊞ *Windscreen and side demist vents, foot vents (front and rear).*

↓ *Foot vents (front and rear).*

When ↓⊞ or ↓ is selected, a small amount of air is also supplied to the side air vents. Close the side air vents if this is not desired.



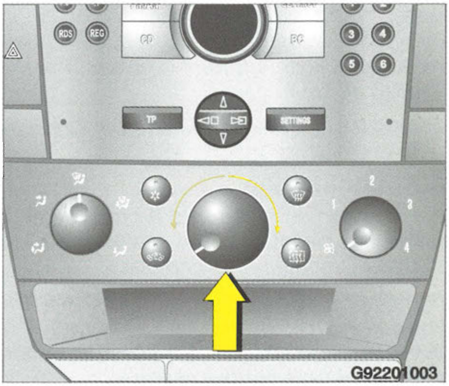
G92201002

Temperature dial

The temperature dial is a rotary switch which is turned to adjust the mix of cold and hot air to set the temperature as desired.

Anticlockwise = cooler air.

Clockwise = warmer air.

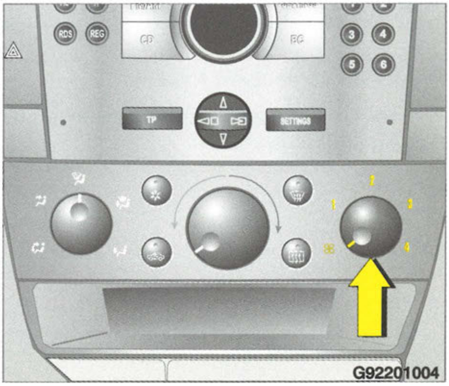


G92201003

Fan dial

The fan dial is a rotary switch for selecting the rate of air flow.

- **✣** *Off*
- **1** *Low*
- **2** *Medium low*
- **3** *Medium high*
- **4** *High*



G92201004

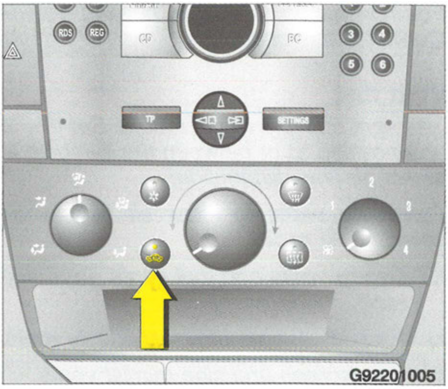
VENTILATION AND HEATING CONTROLS cont.

Air recirculation

Press the ⟲ button to switch to recirculated air. Press the ⟲ button again to deselect recirculation and return to fresh air.

When following another vehicle on dusty roads or if fumes or unpleasant odours penetrate from outside, temporarily select recirculated air. This minimises the entry of outside air.

To further inhibit the entry of dust and fumes, close the windows and turn on the fan, preferably to a high speed. This generates positive air pressure in the passenger compartment.



If occupants are smoking, use the fresh air position is used. Tobacco smoke adheres to the air ducts and will cause stale smelling air if recirculated.

When driving on unsealed roads where the dust is not airborne, select fresh air intake.

Note: *When recirculated air is selected, the humidity increases, the windows can mist up and the quality of the passenger compartment air deteriorates. This may cause the vehicle occupants to feel drowsy. Therefore, this setting is not recommended for long periods of time.*

The light in the switch illuminates when recirculated air is selected.

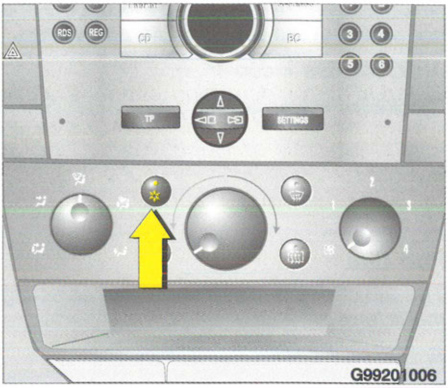
Air conditioning

For information relating to air conditioning within the climate control system, refer to Climate Control in this chapter.

Press the ❄ button to activate air conditioning. The fan is automatically switched on to speed **1**. *Press the ❄ button again to deactivate the system.*

Note: *Air conditioning is fully operational only when the engine is running and will automatically switch off if outside temperatures become too low.*

The light in the switch illuminates when air conditioning is activated.



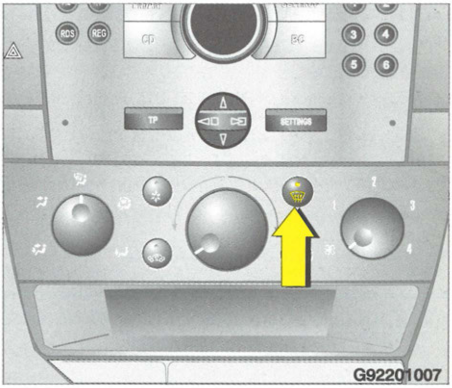
VENTILATION AND HEATING CONTROLS cont.

Windscreen demisting

Press the button to turn on windscreen demisting. Press the button again to turn off windscreen demisting.

The light in the button illuminates when demisting is on.

For further information on window demisting, refer to Air Conditioning in this chapter.



Demisting (rear window)

Press the button to turn on rear window demisting. Press the button again to turn rear window demisting off.

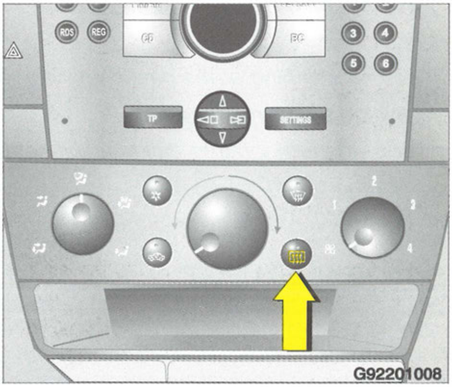
Note: *This feature is operational only when the engine is running.*

The light in the button illuminates when demisting is on.

Mirror demisting (if fitted)

Exterior mirror demisting operates when rear window demisting is switched on.

Press the button to turn on rear window and mirror demisting. Press the button again to turn rear window and mirror demisting off.

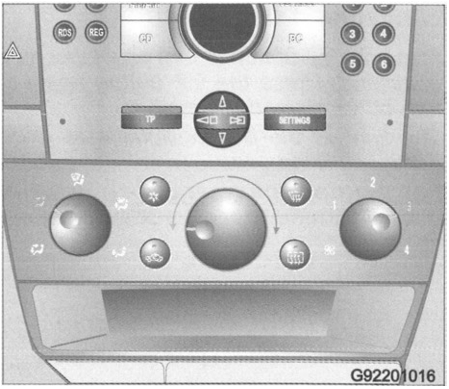


COOLING AND HEATING SETTINGS

Ventilation without air conditioning

To conserve fuel when air conditioning is not required:

- *switch off the air conditioning*
- *switch off air recirculation*
- *turn the temperature dial to a cold setting*
- *set the fan speed as required*
- *set the vent dial to ↕ or →*
- *for air flow to the rear seats, direct the front centre vents slightly towards each other and slightly upwards.*



Heating

Note: *The amount of heat available is dependent on the engine temperature. Therefore, keep the vents closed until the engine has warmed up.*

RAPID HEATING

For rapid warming of the passenger compartment:

- *switch off air recirculation*
- *turn the temperature dial to a hot setting*
- *set the fan to speed 3*
- *set the vent dial as desired.*

SPLIT TEMPERATURE

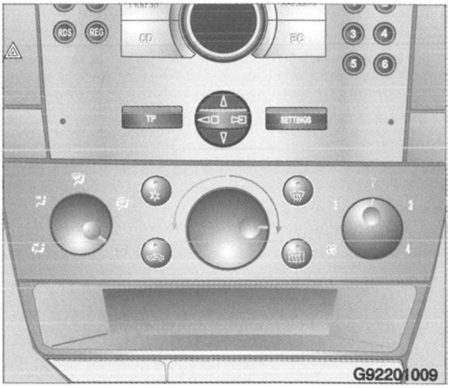
For cool air to the face and warm air to the feet (with the air conditioning switched off):

- *switch off air recirculation*
- *turn the temperature dial to a hot setting*
- *set the vents dial to ↓ or ↕*
- *open the centre vents.*

FOOTWELL

To heat the front and rear footwells:

- *turn the temperature dial to a hot setting*
- *set the vent dial to ↓*
- *turn on the fan.*



AIR CONDITIONING

Air conditioning notes

To conserve fuel, switch off the air conditioning in cold weather. However, once every month (with the engine running) switch the air conditioner on for 5 to 10 minutes, even in winter. This lubricates the air conditioning system.

Note: *The air conditioning system operates only when the fan is on and in temperatures above freezing point.*

At least one vent in the dashboard must be open when air conditioning is on so that the evaporator does not ice up due to a lack of air movement.

When air conditioning is activated, the air is dehumidified and the temperature is adjusted based on the temperature dial setting.

The air conditioner works most effectively with all of the windows closed.

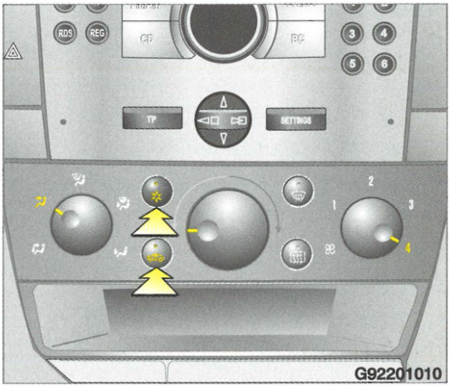
If a fault occurs with the air conditioning, have your Holden Retailer check the system.

Maximum cooling

Use these settings when the passenger compartment air is very hot. Open the windows briefly to allow the hot air to escape, then:

- *switch on the air conditioning*
- *switch on air recirculation*
- *turn the temperature dial to a cold setting*
- *set the fan to the highest speed*
- *set the vents dial to face*
- *open all vents.*

Switch off air recirculation after a short time.

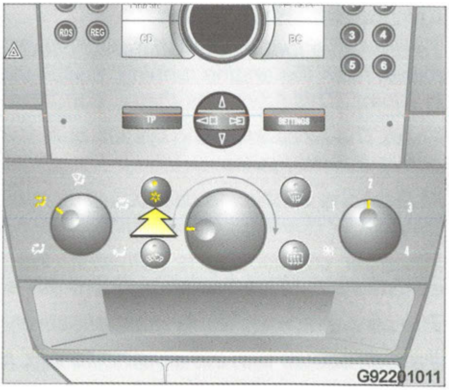


AIR CONDITIONING cont.

Normal cooling

For normal cooling:

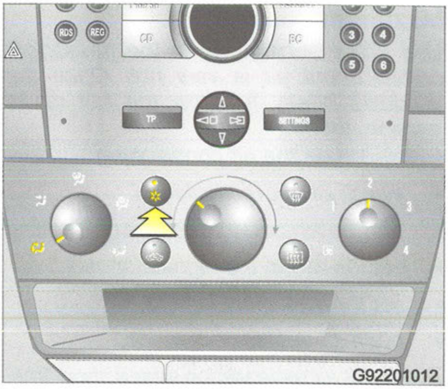
- *switch on the air conditioning*
- *switch off air recirculation*
- *turn the temperature dial to cold*
- *set the fan speed as desired*
- *set the vent dial to ↝*
- *open all vents.*



Bi-level

For warmer air to the feet and cooler air to the face:

- *switch on the air conditioning*
- *switch off air recirculation*
- *set the temperature dial as desired (not to extreme hot or extreme cold)*
- *set the fan speed as desired*
- *set the vents dial to ↡↝*
- *open vents as desired.*

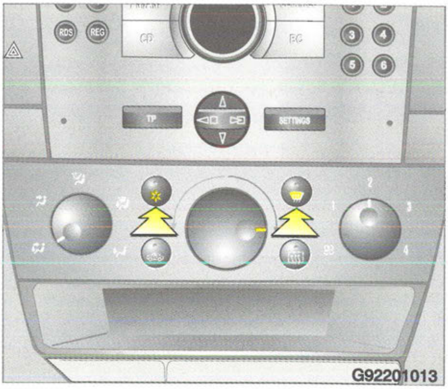


Windscreen demisting

When these settings are selected, the fan automatically switches to speed **4** *and the air flow is directed to the windscreen. For windscreen demisting:*

- *switch on the air conditioning*
- *switch off air recirculation*
- *press the ⌓ button*
- *set the temperature dial to warm.*

Press the ⌓ button again to turn windscreen demisting off. The air conditioning system reverts to the previously selected settings.



WARNING:

Disregarding these settings can cause the windows to mist up which can lead to an accident due to lack of proper vision.

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted)

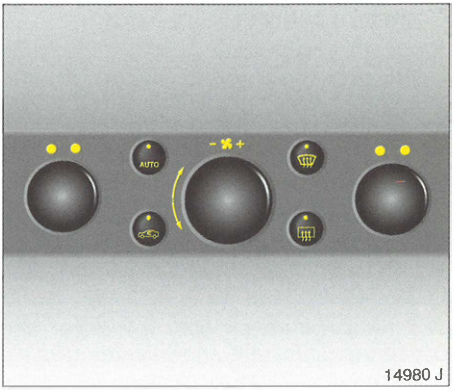
Electronic climate control

The system provides maximum comfort in any weather, at any outside temperature and during any season.

To ensure a constant and comfortable climate in the vehicle, the temperature of the inflowing air, the airflow rate and the air distribution are changed automatically according to climatic conditions outside the vehicle.

The air is automatically regulated in accordance with the settings personally selected for the driver and passenger sides.

Temperature changes due to external influences such as direct sunlight, are compensated for automatically.



When the air conditioner is on, the air is cooled and dehumidified.

When set to automatic mode, the electronic climate control system provides the optimum settings under almost all conditions. If necessary, adjust the system manually using the menu.

The electronic climate control system is only fully operational when the engine is running. At low outside temperatures, the air conditioner switches off automatically.

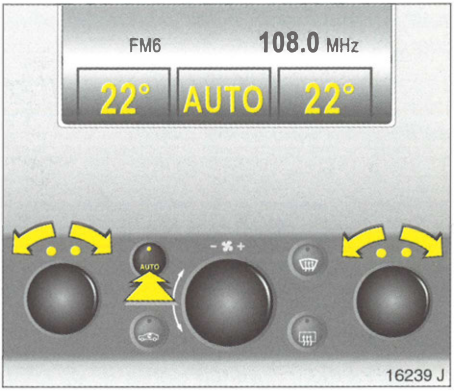
The pollen filter prevents dust, soot, pollen and spores from the outside air entering the vehicle.

Automatic mode

Basic setting for maximum comfort:

1. *Press the* **AUTO** *button.*
2. *Open all the air vents.*
3. *Set the preselected temperature for the driver and passenger using the outer rotary knobs.*
4. *For air conditioner activation settings, refer to Page 1-37.*

If necessary, the preselected temperature can be set higher or lower.



Preselected temperatures

Adjust the preselected temperatures to values between 16°C and 28°C using the outer rotary knobs. For comfort, only change the preselected temperatures in small steps.

If a temperature below 16°C is set, **LO** *appears in the display. This means the electronic climate control system constantly runs with maximum cooling. With this setting, the temperature is not regulated.*

If a temperature above 28°C is set, **HI** *appears in the display. This means the electronic climate control system constantly runs with maximum heating. With this setting, the temperature is not regulated. The preset temperature setting is retained when the ignition is switched off.*

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

Common temperature setting

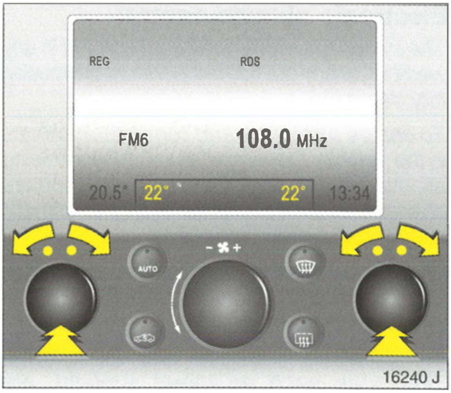
Press the right rotary knob. The same temperature for both the driver and passenger sides can be set using the right rotary knob.

Individual temperature settings

Press the left rotary knob. The temperature for the driver and passenger sides can be set independently using the left and right rotary knobs.

The temperature on both the driver and passenger sides are shown in the display.

For comfort reasons, the temperatures cannot differ by more than 2°C.



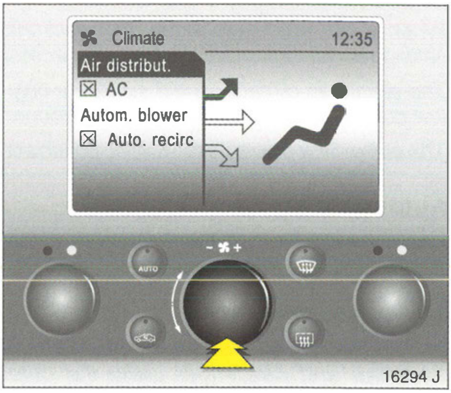
16240 J

Manual settings

Under certain circumstances (for example, iced or misted windows) the functions of the electronic climate control system can be changed manually.

Electronic climate control settings can be changed via the centre rotary knob, the buttons and menu buttons are depicted on the display.

Press the centre rotary knob to call up the menu. The menu for manual climate control settings appears in the display.

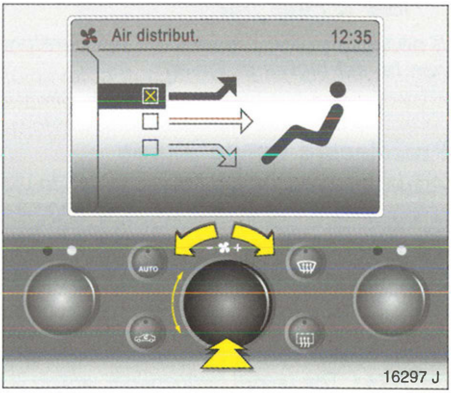


16294 J

Individual menu items are marked by turning the centre rotary knob and selected by pressing it. Selecting certain menus will open a submenu.

To exit a menu, turn the centre rotary knob left or right to **Return** *or* **Main**, *and select by pressing it.*

Manual settings are stored when the ignition is switched off.

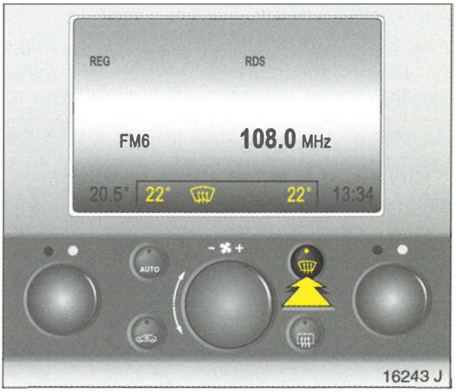


16297 J

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

Window demisting

> **Warning**
>
> **Disregarding the settings described can cause the windows to become misted up which can lead to accidents due to lack of proper vision.**



Press the button. The icon appears in the display and the control indicator in the button illuminates.

The temperature, and the air distribution are adjusted automatically, the fan runs at a faster speed and windows are rapidly cleared of ice and moisture.

The airflow can be increased or decreased by turning the centre rotary knob.

To return to automatic mode, press the button or select **AUTO***.*

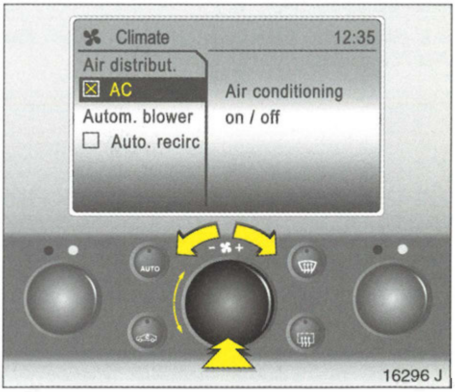
Activating and deactivating the air conditioner

The air conditioner is automatically regulated to provide the greatest possible comfort with the least amount of fuel consumption.

If cooling or dehumidification is unnecessary (in order to save fuel), switch off the air conditioner. In the menu for manual settings, mark **AC** *and press to select.* **Eco** *appears in the display.*

Inflowing air is neither cooled nor dehumidified. This restricts the level of comfort provided by the electronic climate control system. This may cause the windows to mist up, for example.

To activate cooling: In the manual settings menu, select **AC** *and press to activate cooling.*


Climate 12:35
Air distribut.
☒ AC
Autom. blower
☐ Auto. recirc
Air conditioning on / off

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

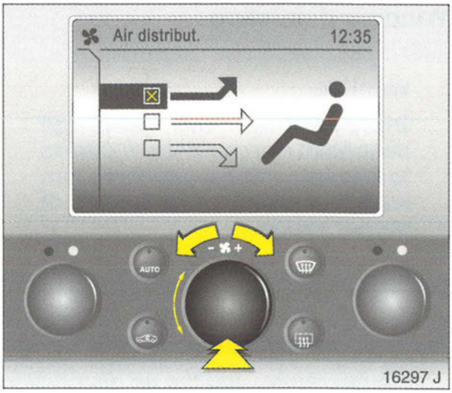
Air distribution

Press the centre rotary knob. The possible air distribution settings appear one after another in the display.

Air distribution can also be set in the **Air distribut.** *menu:*

Up	*Air distribution to the windscreen and front side windows.*
Centre	*Air distribution to the vehicle occupants through adjustable air vents.*
Down	*Air distribution to the front and rear foot area.*

To return to automatic mode, deactivate the current setting, or press **AUTO***.*

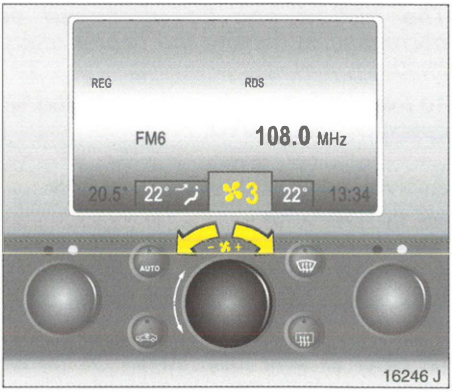

Air distribut.
12:35
☒
☐
☐
AUTO
- ✻ +
16297 J

Air flow

Turn the centre rotary knob to the right or left. The selected fan speed is displayed with the ✻ *icon and the number in the display.*

At **0** *speed, both the fan and air conditioner are switched off.*

To return to automatic mode, press the **AUTO** *button.*

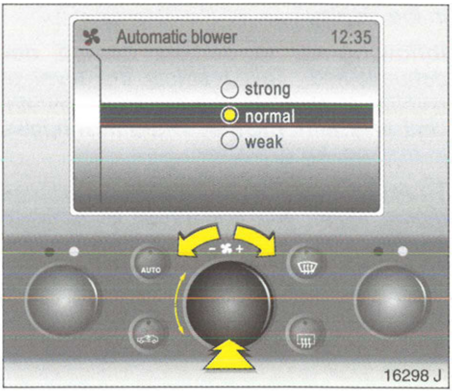

REG
RDS
FM6
108.0 MHz
20.5°
22°
✻3
22°
13:34
AUTO
- ✻ +
16246 J

Fan regulation in automatic mode

Fan regulation in automatic mode can be modified.

In the menu for manual settings, select the item for the **Autom. blower***. Select the desired regulation.*

Depending on the setting, the maximum airflow, and therefore the noise level, will increase.


Automatic blower
12:35
○ strong
● normal
○ weak
AUTO
- ✻ +
16298 J

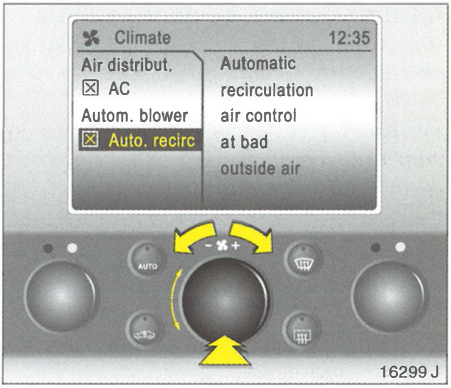
ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

Switching automatic recirculation on or off

The automatic air recirculation system has an air quality sensor to detect harmful gases in the outside air. If harmful gases are detected the system will automatically switch to recirculation.

In the manual settings menu, select menu item **Auto. recirc** *and switch it on or off by pressing it.*

Switch to manual air recirculation as necessary.



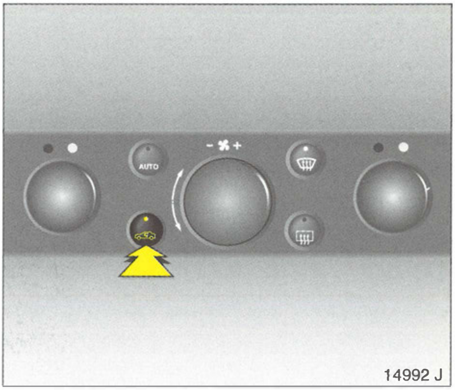
16299 J

Manual air recirculation

Press the 🚗 button to switch between recirculated and outside air. The light in the switch illuminates when the recirculate setting is selected.

The exchange of fresh air is reduced in air recirculation mode. The quality of the passenger compartment air deteriorates which may cause the vehicle occupants to feel drowsy. In operation without cooling, the air humidity increases, so the windows may mist up. Consequently, the air recirculation system should only be run for short periods of time.

To switch off the air recirculation, press the 🚗 button again.



14992 J

Air conditioning with the engine not running

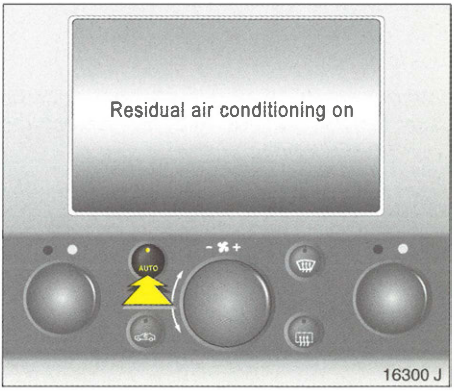
When the vehicle is stationary (and the ignition is off), any heating or cooling power still in the system can be used to condition the passenger compartment.

Press **AUTO** *with the ignition off.*

'**Residual air conditioning on**' *is displayed briefly.*

Air conditioning operates for a limited period of time.

To deactivate air conditioning, press the **AUTO** *button.*


Residual air conditioning on

16300 J

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

Climate control system settings

When the vehicle is locked using the key remote control, the climate control system settings are saved for that particular remote control.

General information

If the windscreen mists up during damp weather, set the electronic climate control system as described in Window demisting, in this chapter.

The electronic climate control system is only fully operational when the engine is running.

The electronic climate control system functions most efficiently when the windows are closed. If the passenger compartment has heated up considerably after a long period in direct sunlight, briefly open the windows so that the heated air can quickly escape.

Do not cover the sensor between the air vents in front of the windscreen.

Maintenance

Operate the air conditioner at least once a month for a few minutes, regardless of the weather and time of year.

If a fault occurs in the electronic climate control system, consult a Holden Dealer.

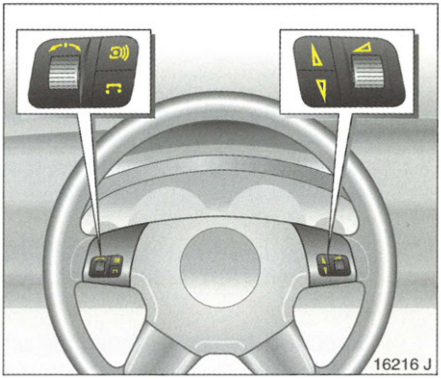
RADIO AND PHONE

Radio

If switched on, the radio stays on until the key is removed from the ignition. Remember to remove the key when leaving the vehicle for any length of time or you may flatten the battery.

Refer to the audio handbook for additional operating instructions.

Radio controls in the steering wheel



Left-hand side:

↶•↷	*Scroll up/down*
◘))	*Radio: Next stored station* *CD: Restart CD* *MP3 (if fitted): Next directory*
⊓	*Change between radio and CD mode*

Right-hand side:

∆	*Radio: Upward station search* *CD/MP3: Skip track forward*
∇	*Radio: Downward station search* *CD/MP3: Skip track backwards*
◢	*Adjust volume*

WARNING:

Due to the nature of the electrical system used within this vehicle, the fitting of an alternative aftermarket audio system is not recommended. To do so could possibly have an adverse effect on the operation of various electrical circuits within the vehicle.

Mobile phones and CB radios

Mobile phones and CB radio equipment, which use an integrated antenna may temporarily affect the vehicle electronics when used inside the vehicle due to the interference created when transmitting. Therefore, use only mobile phones and CB equipment that have an antenna fitted to the outside of the vehicle. For information on installing a mobile phone kit, consult your Holden Retailer.

CRUISE CONTROL

Operating cruise control

This feature makes it possible to store and maintain a constant speed (above approximately 30 km/h) without using the accelerator pedal.

WARNING:

- **Do not use cruise control when the road or driving conditions could require varying speeds. A constant speed may not be practical in heavy or varying traffic or on winding, slippery or rough roads.**

- **Remember that when the cruise control is maintaining your speed, taking your foot off the accelerator pedal will not reduce the vehicle speed. To quickly deactivate cruise control, you should press the brake or clutch pedal or press the O button.**

- **When cruise control is active, your reaction time may be increased due to the different position of your feet.**

- **If your vehicle is fitted with automatic transmission, it is advisable to use cruise control only when the transmission selector is in D (drive).**

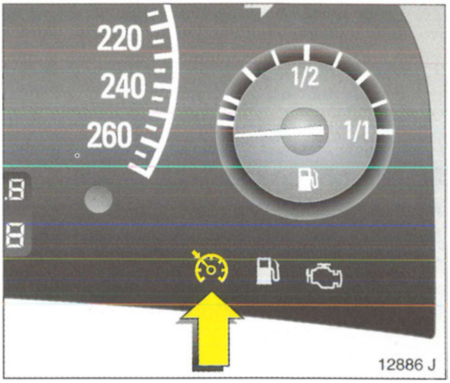
- **Cruise control will not apply the vehicle brakes. Therefore, the vehicle may gain speed when going down steep hills.**

- **When climbing steep hills (particularly when towing) it is possible for the vehicle to lose speed. You may need to switch off cruise control and use the accelerator pedal.**

- **Disregarding these instructions may lead to injuries or loss of life.**

Indicator light

The ⏲ light in the instrument panel remains illuminated while the system is active.

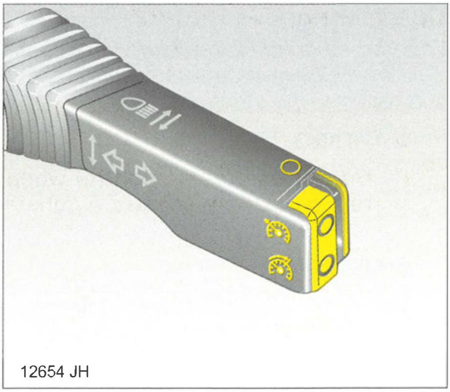


CRUISE CONTROL cont.

Controls

*To operate cruise control, use the ⏲, ⏲ and **O** buttons on the turn signal lever.*

For safety reasons, the cruise control cannot be activated until the foot brake has been operated at least once after the ignition has been turned on.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Activate

1. *Press the accelerator pedal until the vehicle is travelling at the desired speed (above approximately 30 km/h).*
2. *Tap the ⏲ button.*

   The ⏲ light in the instrument panel illuminates.
3. *Release the accelerator pedal, as cruise control maintains the selected speed.*

The vehicle speed can be temporarily increased by pressing the accelerator pedal. When the pedal is released, the previously stored speed is resumed.

To increase speed with cruise control active:

To increase speed without using the accelerator pedal, hold down the ⏲ button or tap it repeatedly. This increases the speed continuously or in steps of 2 km/h.

When the ⏲ button is released, the selected speed is stored and maintained.

To reduce speed with cruise control active:

To decrease speed without using the accelerator pedal, hold down the ⏲ button or tap it repeatedly. This reduces the speed continuously or in steps of 2 km/h.

When the ⏲ button is released, the selected speed is stored and maintained.

Deactivate

*Tap the **O** button. Cruise control is deactivated, the ⏲ light in the instrument panel goes out and the vehicle slowly decelerates.*

To continue driving, press the accelerator pedal in the usual way.

Cruise control is automatically deactivated when any of the following occur:

- *vehicle speed drops below approximately 30 km/h*
- *the brake pedal is pressed*
- *the clutch pedal is pressed*
- *for vehicles with automatic transmission, the selector lever is moved to **N** (neutral).*

Resuming the stored speed:

Tap the ⏲ button at a speed above approximately 30 km/h. Cruise control resumes at the previously selected speed.

The stored speed is erased when the ignition is switched off.

TILT STEERING AND BONNET

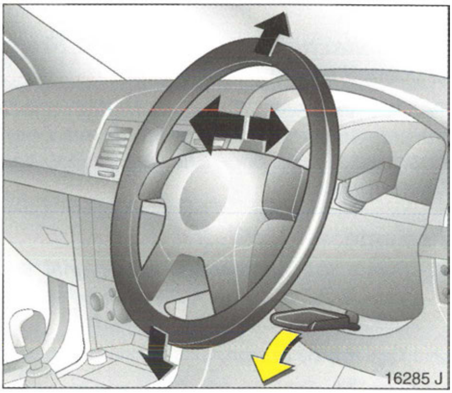
Tilt steering

With the steering lock released, move the lock lever downwards to adjust the height and reach of the steering wheel.

Push the lock lever upwards to set the adjustment, ensuring the lever clicks into position. Jiggle the steering wheel to ensure it has locked securely, before driving.

WARNING:

As with all the other driver position controls, do not adjust the steering wheel while driving.



Open the bonnet

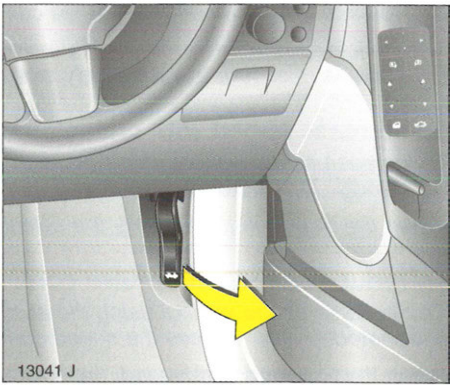
The bonnet release lever (🚗) is located under the right-hand end of the dashboard.

Pull the lever to release the bonnet.

The bonnet releases, but it is prevented from being fully opened due to the safety catch.

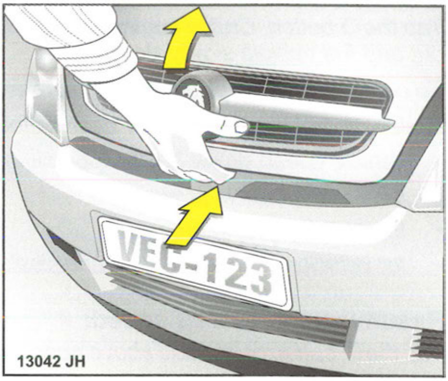
Ensure the lever fully returns to its original position.

Note: *Before fully opening the bonnet, clear the bonnet of materials such as leaves, dirt and snow that may slide down and obstruct the air intake.*



A safety catch release lever is located on the underside of the bonnet. It is approximately one hand width to the right of the centre of the radiator grille.

To open the bonnet, lift the safety catch lever and then lift the bonnet.



Close the bonnet

Lower the bonnet gradually until it is nearly closed then allow it to fall under its own weight.

Always check that the bonnet is properly closed by attempting to lift the front edge and that the release lever inside the vehicle has returned to its original position.

Notes

CHAPTER

2

Locks

Page

2-2 Keys

2-4 Child safety locks

2-4 Door locks

2-6 Deadlocking

2-7 Bootlid / tailgate lock

2-8 Immobiliser

KEYS

Security codes

Your vehicle has a card listing various security numbers for your vehicle. Please keep the security card in a safe place, away from your vehicle.

Also take note of the key code on alloy wheels, if they are fitted with locks.

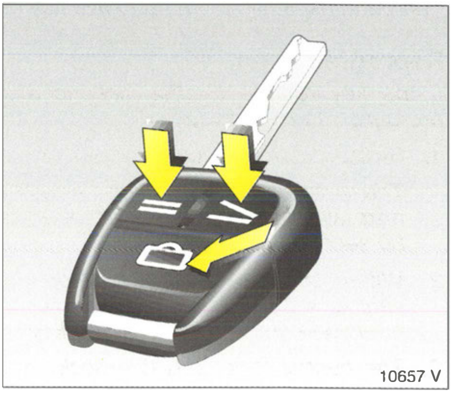
Remote control

Treat the key remote control with care; it should be protected against moisture and high temperatures, and should not be operated unnecessarily. Point the remote control at the vehicle when operating it.

Use the = button to lock and deadlock the doors and the boot lid / tailgate and to lock the fuel flap.

Use the ≥ button to unlock and undeadlock the doors and boot lid / tailgate and to unlock the fuel flap.

Use the 💼 button to unlock only the boot lid / tailgate.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The turn signal lights flash briefly to show that the remote control is operational.

Note: *The remote control will unlock all of the doors and release the fuel flap.*

Replacing the battery

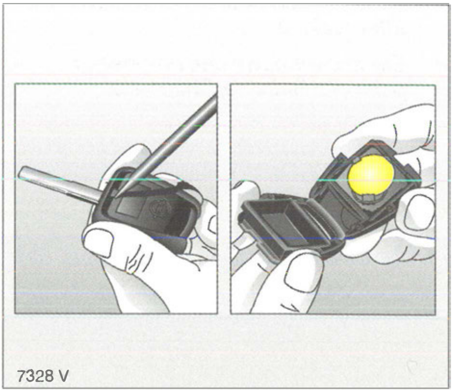
The key remote control is powered by a battery. A weakening battery is indicated by a progressive loss of range. This means you must be closer to the vehicle when pressing the buttons to activate the system.

Note: *Tinting the vehicle windows with a metallic film reduces the range of the key.*

To install a replacement battery:

1. *Open the battery compartment with a screwdriver as illustrated.*
2. *Disengage the remote control from the battery and open the battery cover.*

   Note: *Change the battery within 3 minutes, otherwise the remote control will require reprogramming.*
3. *Replace the battery, ensuring that the new replacement is inserted correctly.*
4. *Install the battery cover and the remote control; it clicks into position.*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KEYS (cont)

Personal Settings

When the vehicle is locked with the key remote control, the current settings for instrument illumination, central locking, climate control (if fitted) and the drivers seat and mirror memory functions (if fitted) are stored with that key. These personal settings are activated when the specific key remote control is used.

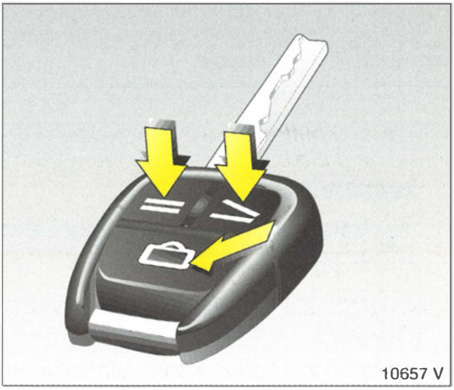
The personal settings for up to five key remote controls can be stored.

Reprogramming

If the key remote control malfunctions, reprogram the key as follows:

1. *Switch on the ignition.*

   The system is now in programming mode and will remain in this mode for 30 seconds.
2. *Within 30 seconds, while inside the vehicle with the doors closed, briefly press one of the buttons on the key.*
3. *The central locking system locks and unlocks as it reprograms the remote control.*



Note:

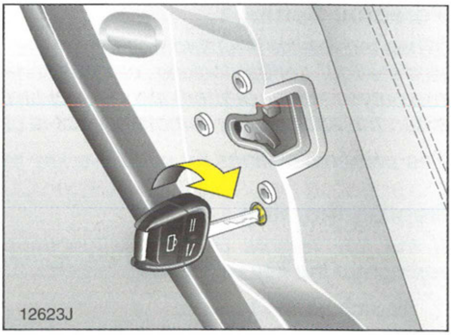
- *The remote control lock and unlock buttons may not work near high radio activity, such as under TV towers. However, the doors can be locked and unlocked by turning the key in the door lock.*
- *Locked doors are unlocked automatically in the event of an accident (to allow assistance from outside) provided that the ignition is not switched off.*
- *If the system is overloaded due to repeated operation within a short time, the power supply is cut off for approximately 30 seconds.*
- *If the driver's door is not closed properly, the locking system will unlock immediately after locking.*
- *Electric windows can be closed from outside the vehicle by holding the key in the lock position. Refer to Chapter 3.*

CHILD SAFETY LOCKS AND DOOR LOCKS

Child safety rear door locks

Child safety locking helps prevent the rear doors from being opened from inside the vehicle. The locks are located on the rear edge of the rear doors, accessible when the door is open.

Using the key, turn the lock towards the vehicle. The door can now be opened only by raising the inside lock button then lifting the outside door handle.



WARNING:

For safety, check that the child safety rear door lock is operating correctly (after setting) by trying to open the door from inside the vehicle.

To lock

A door is locked when the lock knob in the door is pressed down. The doors, fuel filler lock and boot lid / tailgate are locked when the remote control is used to lock the vehicle. The vehicle cannot be locked using the remote control when the key is in the ignition.

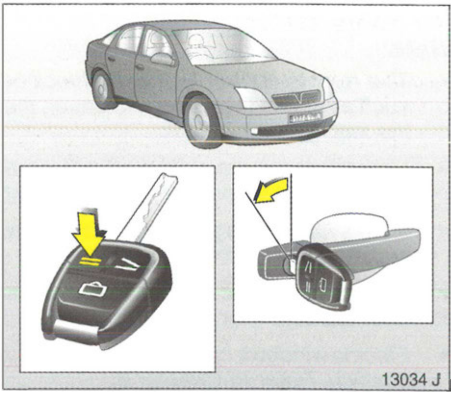
PREFERRED METHOD

Press the ═ button.

The turn signals flash when the remote control signal is received.

ALTERNATIVE METHODS

1. *In the driver's door lock, turn the key towards the rear of the vehicle then turn it back to the vertical position.*
2. *Remove the key.*
3. *Press the door lock knobs down (pressing the driver's door lock knob locks all of the doors).*



DOOR LOCKS cont.

To unlock

The doors are unlocked when the lock knob is raised. When the remote control is used to unlock the vehicle, the doors, fuel filler lock and boot lid / tailgate are unlocked.

PREFERRED METHOD

Driver's door: Press the ≥ button once.

All doors: Press the ≥ button twice.

The turn signals flash when the remote control signal has been received.

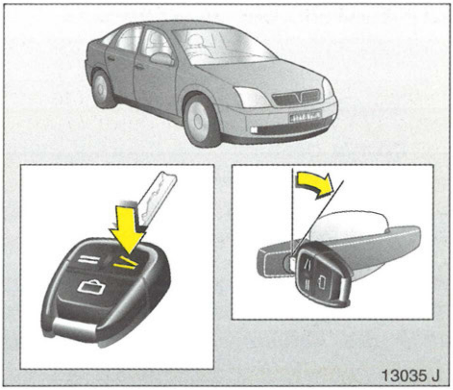
ALTERNATIVE METHOD

Turn the key in the driver's door lock towards the front of the vehicle:

- *once to unlock the driver's door only*
- *twice to unlock all doors.*

UNLOCKING FROM INSIDE THE VEHICLE

Raise the door lock knobs.



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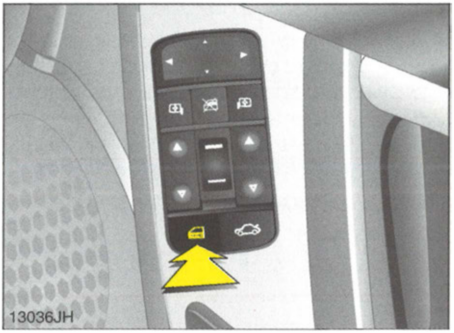
All doors switch

If staying in the vehicle, the 🔒 button (located in either front door) can be used to lock and unlock the doors.

To lock the vehicle, ensure that the doors are closed then press the 🔒 button (located in either front door).

To unlock the vehicle, again press the 🔒 button.

Note: *If the deadlock is engaged, this button will not unlock the doors.*



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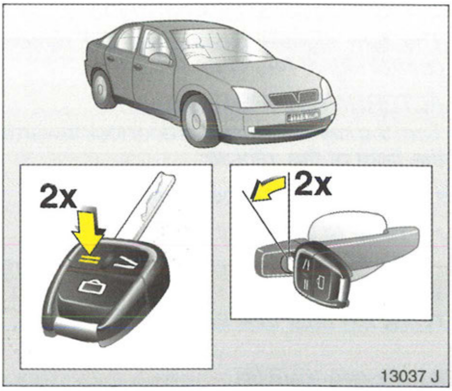
DEADLOCKING

For extra protection when leaving the vehicle, you can deadlock the doors. Deadlocking mechanically jams the electric locks so that the doors cannot be opened even if entry is gained by breaking the window glass.

WARNING:

Do not deadlock the doors if there are people in the vehicle. The doors cannot be unlocked from inside.

Engage deadlock



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METHOD 1

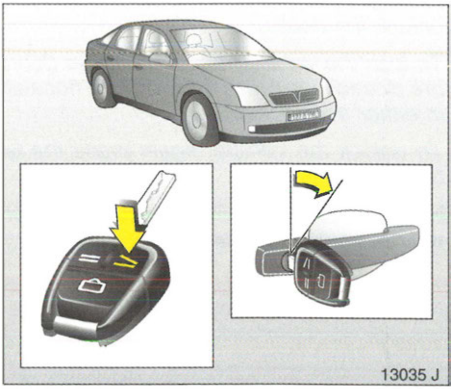
Press the = button twice. That is, once to lock the vehicle, then again within 10 seconds, to set the deadlock.

Note: *The driver's door must have been recently opened and all doors must be closed.*

METHOD 2

Turn the key in the driver's door lock, as illustrated, twice. That is, once to lock the doors, then again to set the deadlock.

Disengage deadlock



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METHOD 1

Driver's door: Press the ≥ button once.

All doors: Press the ≥ button twice.

Disengaging deadlock occurs when unlocking the doors in the normal way.

METHOD 2

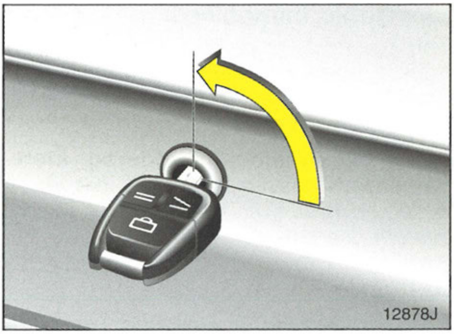
Turn the key in the driver's door lock towards the front of the vehicle:

- *once to unlock the driver's door only*
- *twice to unlock all doors.*

Note: *Disengaging the deadlock is not possible in any other way, so keep a spare key in a safe place.*

BOOT LID / TAILGATE LOCK

Locking and unlocking



To unlock the boot lid / tailgate with the remote control, press either ≥ or ☐ button.

To lock the boot lid / tailgate with the remote control, press the = button.

If the boot lid / tailgate is not opened within 5 minutes of unlocking with the remote control, it is automatically locked. When the boot lid / tailgate is open, the 🚗 light illuminates in the instrument panel.

ACTIVATE WITH CENTRAL LOCKING

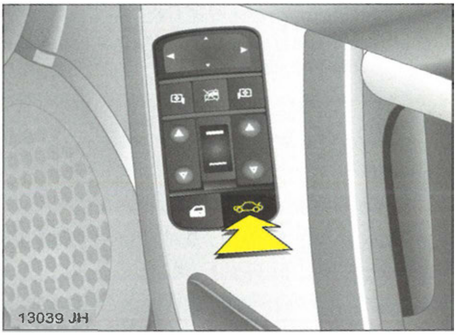
The central locking system is not activated via the ☐ button. However, the boot lid / tailgate can be set to function with the central locking (≥ and = buttons).

When the boot lid / tailgate key slot is horizontal, the boot lid / tailgate locks and unlocks with the doors. To keep the boot lid / tailgate permanently locked regardless of the door lock position, turn the key slot to the vertical position.

To unlock the boot lid / tailgate with the key, turn the key fully clockwise. The key cannot be removed in this position.

BOOT LID / TAILGATE, DOOR SWITCH

To unlock the boot lid / tailgate from inside the vehicle, press the 🚗 button on the driver's door switch panel.



License plate lamp

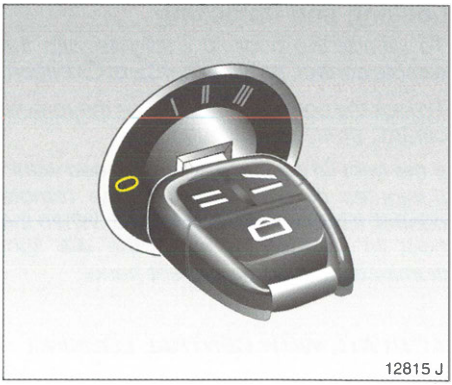
The license plate lamp illuminates when the bootlid / tailgate is unlocked using the remote control. (This includes the use of either ≥ or ☐ button.)

After unlocking the bootlid / tailgate, the lamp illuminates for approximately 5 minutes. If the bootlid / tailgate has been opened, the lamp remains illuminated while the bootlid / tailgate is open and the 5 minute delay begins when it is closed.

After the 5 minute delay, the bootlid / tailgate is locked and the license plate lamp is switched off.

To switch the license plate lamp off manually, fully close the bootlid / tailgate and press the = button on the remote control.

IMMOBILISER



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Electronic immobiliser

The key helps to protect the vehicle from theft by means of the electronic immobiliser. The immobiliser system electronically disables the starting system.

When the key is used to start the vehicle, the system checks the key. If the key is accepted as an 'authorised' key, the starting system is enabled.

Activate

The immobiliser is activated when the ignition is switched to **O** *and the key is removed.*

Deactivate

The immobiliser is deactivated when the ignition is switched on with an authorised key.

Note: *Deactivation is not possible in any other way, so keep a spare key in a safe place.*

Indicator

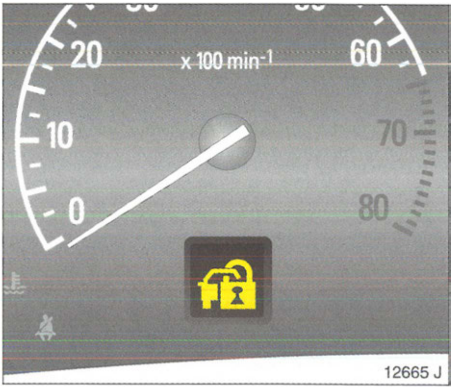
If the key is not authorised, the 🔒 *symbol in the instrument panel illuminates and the engine will not start.*

1. *Turn the key to* **O** *and then remove it.*
2. *Insert the key into the ignition switch again.*
3. *Repeat the starting procedure.*

If 🔒 *continues to illuminate, try to start the engine using the spare key.*

Have your Holden Retailer check the system.

Note: *The immobiliser does not lock the doors.*



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CHAPTER 3

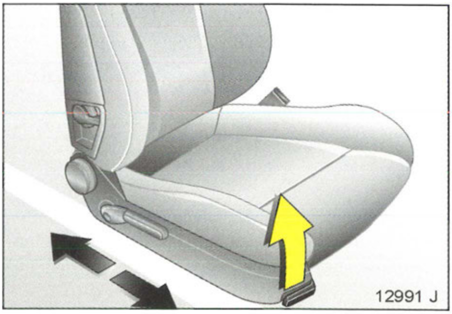
Know your vehicle

Page
3-2 Front seat adjustment - manual seats
3-4 Front seat adjustment - electric seats
3-8 Rear seat adjustment
3-10 Seat belts
3-13 Child restraints
3-17 Electric windows
3-19 Interior lights
3-20 Park brake
3-21 Driver's door switches
3-22 Mirrors
3-24 Front armrest and accessory socket
3-25 Luggage compartment enlargement
3-26 Electrical system warning

FRONT SEAT ADJUSTMENT - MANUAL SEATS

Forward / rearward

Lift the lever at the front of the seat then slide the seat forward or backward as desired. After releasing the lever, try to move the seat to ensure that it has locked into position.

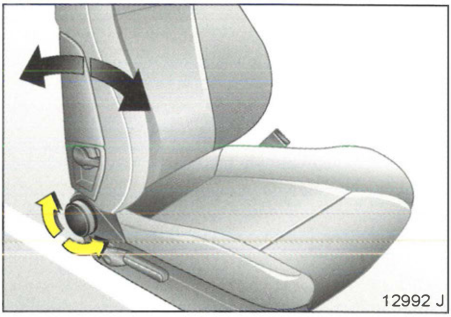


WARNING:

Never adjust the driver's seat while driving. The seat could move suddenly and cause the driver to lose control.

Recline / incline

To adjust the angle of the seat-back, turn the handwheel, as illustrated.



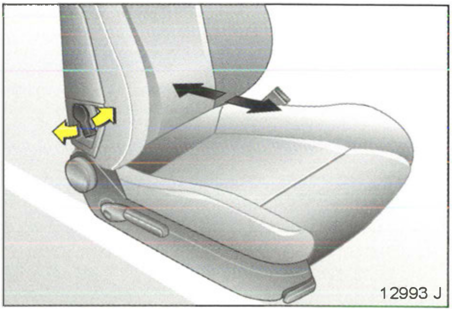
WARNING:

To avoid reducing effectiveness of seat belts, it is recommended that the seatbacks be reclined to no more than a semi-reclined position when the vehicle is moving. The fully reclined position should be used only when the vehicle is stationary.

Lumbar support (if fitted)

Move the lever on the door-side of the seat, as illustrated, to adjust the lumbar support.

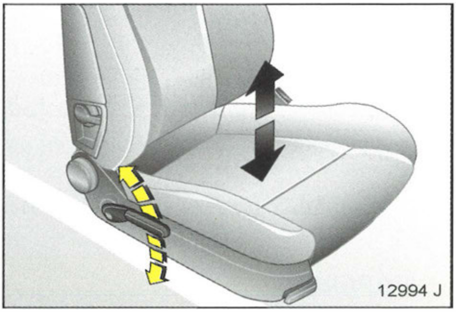
Do not lean heavily on the seat while adjusting the lumbar support.



FRONT SEAT ADJUSTMENT - MANUAL SEATS cont.

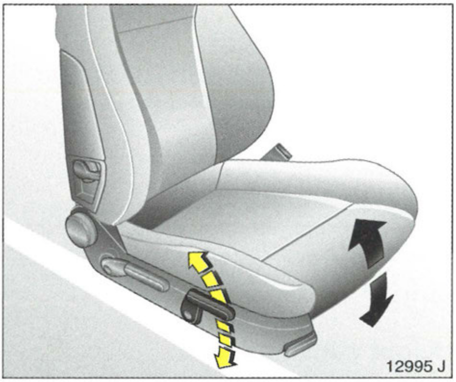
Height adjustment (if fitted)

Pump the lever on the door-side of the seat, as illustrated, up to raise the seat height or down to lower the seat.



Inclination adjustment (if fitted)

Pump the lever on the door-side of the seat, as illustrated, upwards to incline the seat or downwards to bring the seat back towards level.



FRONT SEAT ADJUSTMENT - ELECTRIC SEATS

Electric front seats (if fitted)

Care must be taken when operating the electrically adjustable seats. There is a risk of injury, particularly for children, and a danger that articles could become trapped.

Keep a close watch on the seats when adjusting them and inform passengers of your intentions.

Electric seat adjustments are made with switches located on the outboard side of the seats.

WARNING:

Never adjust the driver's seat while driving. The seat could move suddenly and cause the driver to lose control.

Forward / rearward

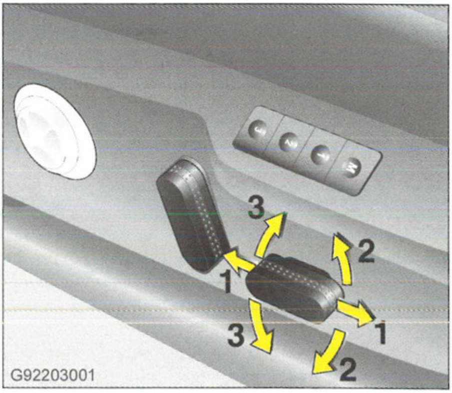
Move and hold the switch **1** *forward or backwards to adjust the seat forward or backwards. Release the switch to stop the seat in the desired position.*

Inclination adjustment

Move and hold the front of the switch **2** *up or down to adjust the inclination of the seat. Release the switch when the seat in at the angle.*

Height adjustment

Move and hold the rear of the switch **3** *up or down to raise or lower the seat. Release the switch when the seat is at the desired height.*

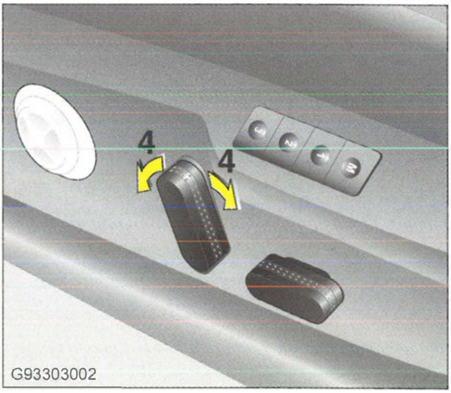


Recline / incline

Move and hold the switch **4** *forwards or backwards to adjust the angle of the seat back. Release the switch when the seat back is at the desired angle.*

WARNING:

To avoid reducing effectiveness of seat belts, it is recommended that the seatbacks be reclined to no more than a semi-reclined position when the vehicle is moving. The fully reclined position should be used only when the vehicle is stationary.



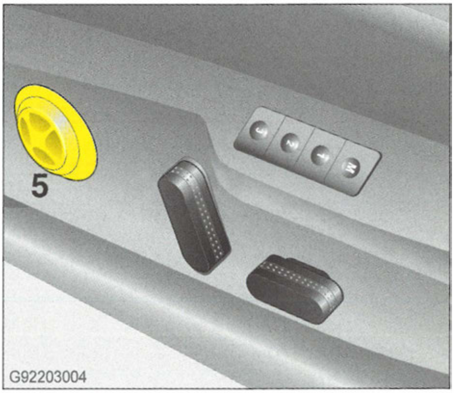
FRONT SEAT ADJUSTMENT - ELECTRIC SEATS cont.

Lumbar Support

Adjust the lumbar support using the four-way switch **5** *on the outboard side of the seat.*

Push the button up or down to adjust the height of the support.

Push the button forward or backward to increase or decrease the amount of support.



Memory function

The memory function can store three different position settings for the drivers seat, exterior mirrors and interior mirror.

Memory settings can be set when one of the following conditions is met.

- *the ignition is on.*
- *within ten minutes of switching the ignition off.*
- *within ten minutes of opening or closing the drivers door.*
- *within ten minutes of inserting or removing the ignition key.*

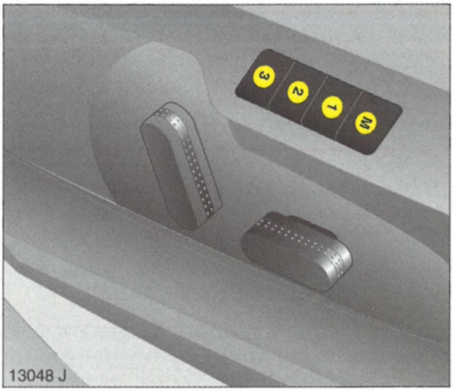
Memory settings cannot be stored when the vehicle is locked.

Storing memory settings

To store memory settings:

- *adjust the seat*
- *adjust the exterior mirrors*
- *adjust the interior mirror*
- *press the memory button* **M** *and the chosen position button* **(1,2 or 3)** *simultaneously. The stored memory setting is acknowledged by an acoustic beep.*

To activate the memory settings, keep position button **1,2 or 3** *pressed until the stored seat and mirror positions have been reached.*



For safety reasons, the seat adjustment stops immediately if the position button is released or one of the setting buttons is operated.

Adjustments may only be performed with the vehicle stationary.

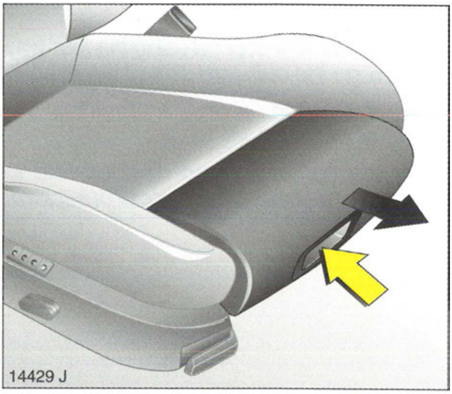
If the seat setting is electrically overloaded, the power supply is automatically cut off for a short time.

FRONT SEAT ADJUSTMENT cont.

Thigh support - driver's seat (if fitted)

To adjust the thigh support, raise the handle on the front of the seat and slide seat padding.

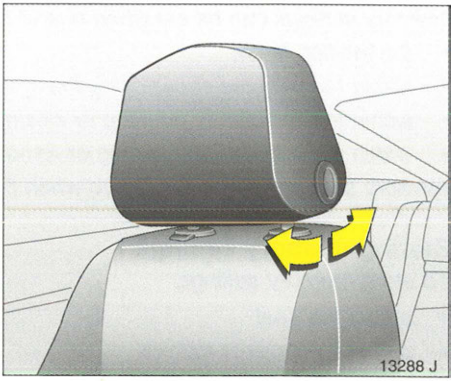
Do not adjust the thigh support while driving.



Front seat head restraints

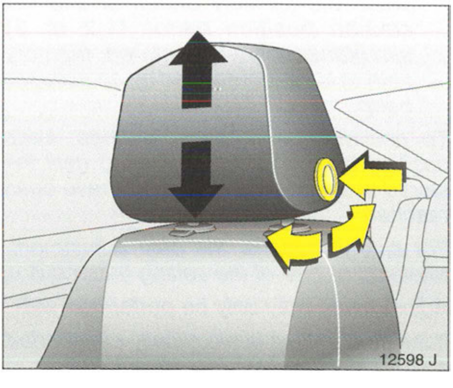
To adjust the tilt angle of the head restraint, move the bottom of the head restraint backward or forward.

Note: *The head restraint safety feature is not intended as a headrest. It is solely for the reduction of whiplash neck movement in an accident involving your vehicle.*



To adjust the height of the head restraint, press the release button as illustrated and raise or lower the head restraint. Release the button and continue to move the head restraint until it clicks into position.

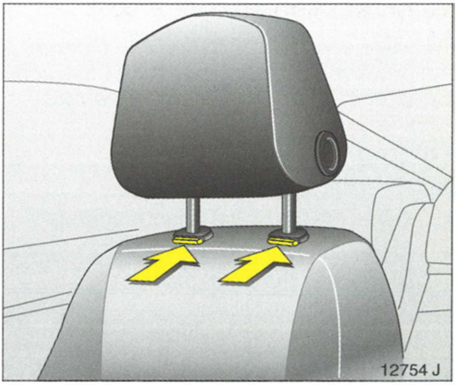
The upper edge of the head restraint should be level with the top of the head; never at neck level.



FRONT SEAT ADJUSTMENT cont.

Front seat head restraints cont.

To remove a head restraint, press the release buttons, as illustrated, and lift the head restraint out.



Front seat active head restraints

This vehicle is fitted with active head restraints on the front driver and passenger seats.

In the event of a moderate to severe rear-end impact, the active head restraints (on the front seats) automatically tilt forwards. The head is more effectively supported by the head restraint and the risk of neck injury is reduced.

WARNING – SIDE IMPACT AIRBAGS

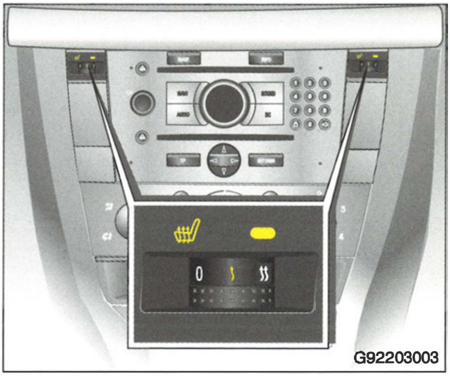
Do not fit unauthorised seat covers as they may impair the deployment of the side impact airbags. Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door.

Front seat heating (if fitted)

Seat heating is available when the ignition is switched on. Two adjustment wheels are located below the centre air vents, with a control indicator above each wheel.

Turn the appropriate wheel to set the driver or passenger seat heating to the required level.

To switch the heating off, adjust the wheel to the **0** *setting.*



REAR SEAT ADJUSTMENT

Rear seat adjustment

The rear seat can be folded into different positions. To avoid injury from passing traffic, never stand on the road-side of the vehicle when converting the rear seat. Refer to Chapter 10 about loading your vehicle.

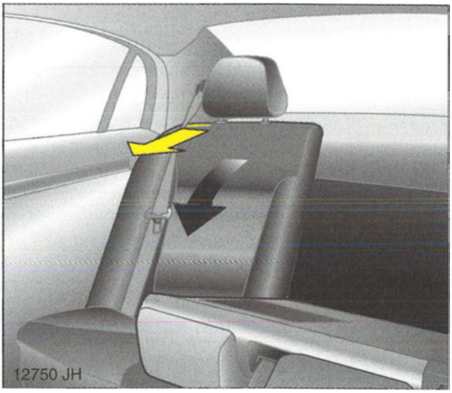
Folding seats

Before folding the rear seats:

- *lower the rear seat head restraints*
- *place the belt buckles into the storage pockets in the seat cushions*
- *move the front seats forward, as required.*

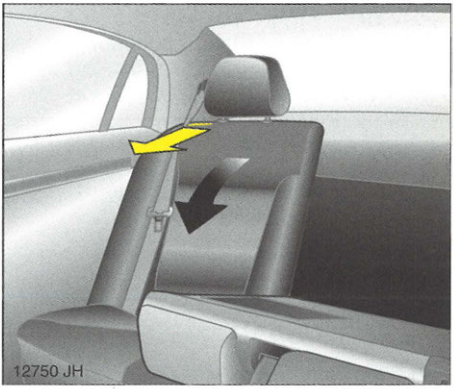
Note:

The centre seat belt locks if the centre seat is not secured in the vertical position.



REAR SEAT ADJUSTMENT cont.

1. *Unlatch the seat-back by lifting the lever at the top of the outer seat.*
2. *Fold the seat-back forward onto the seat cushion.*

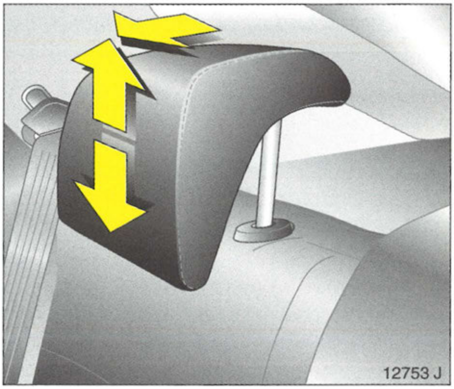


RETURN TO UPRIGHT

When returning the rear seats to upright, ensure that the seat belts are not trapped and that the seats audibly click into position.

Note: *The three point seat belt for the centre seat can be pulled out of the retractor only when the seatbacks are correctly in position.*

Rear seat head restraints



To adjust the height of the head restraint, pull up the rear of the head restraint to raise it. Push it down firmly to lower it.

The upper edge of the head restraint should be level with the top of the head.

To remove the head restraints, release both of the locking springs, located at the rear of the head restraint, while pulling upwards.

Note: *The head restraint safety feature is not intended as a headrest. It is solely for the reduction of whiplash neck movement in an accident involving your vehicle.*

Rear centre head restraint

If the centre seat is not occupied, push the head restraint down to its lowest position to improve the rear view: press the locking springs in and push the restraint down.

If the seat is occupied, set the head restraint height based on the passenger's height.

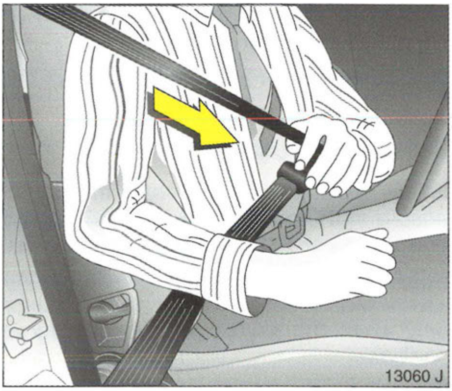
SEAT BELTS

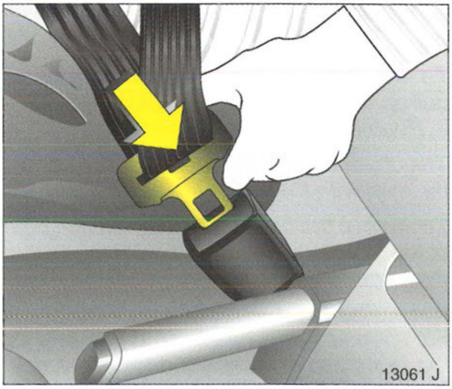
Lap-sash belts

To put on a lap-sash seat belt, pull the belt across your body and insert the metal tongue into the buckle. The metal tongue locks correctly into place with a click. After fastening the seat belt, settle it at the hip, then tension the belt by tugging the sash upward. Any extra belt length retracts automatically.

The lap section should be worn as low as possible on your hips; not on your waist. Make sure the sash and lap sections of the seat belt are free from twists and fit firmly.

The emergency locking retractor belt allows you to move freely while the vehicle is travelling normally. The belt will lock immediately on fast braking, impact with a solid object or any quick movement by the wearer.

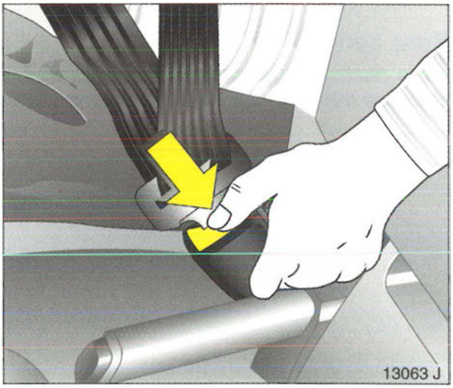




Seat belt warning chime

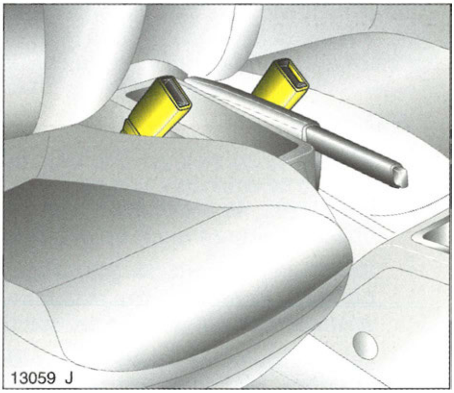
Refer to Chapter 1 for information about the seat belt warning light and chime.

To undo the belt, press the release button on the buckle and allow the belt to retract. Check that it fully retracts without twisting or turning.



SEAT BELTS cont.

Seat belt pretensioners



The seat belt system (with the exception of the centre rear seat belt) incorporates one-use-only belt pretensioners.

In the event of a moderate to severe head-on or tail-end collision, the belt buckles are pulled downwards, instantly tightening the belts.

If the belt pretensioners have been actuated, the 💺 light illuminates and yellow tabs become visible on the buckles.

Note: *Although the seat belt may remain operational apart from this feature, the entire system must be replaced by a Holden Retailer.*

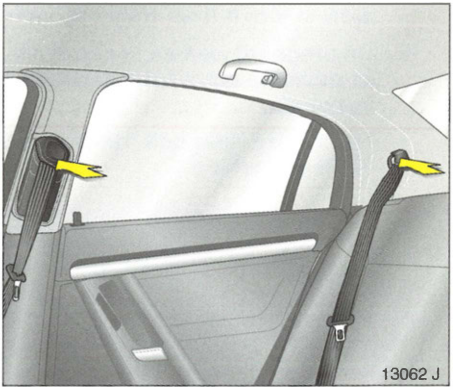
To check that the bulb is working, the 💺 light illuminates for a few seconds when the ignition is switched on. If it does not go out or if it illuminates during driving, there is a defect in the system and the belt pretensioner and / or airbag system might not work in an accident. Have a Holden Retailer check the systems as soon as possible.

To prevent malfunctions, do not place magnetic objects in the immediate vicinity of the centre console where the electronics for the system are located.

WARNING:

The belt pretensioners may trigger suddenly and cause injury if they are handled incorrectly. Therefore, front seats and belts should only be removed, disposed of and replaced by a Holden Retailer.

Seat belt height adjustment



1. *Pull the belt slightly outwards.*
2. *FRONT*

   Slide the guide upwards, or press the button, as illustrated, to slide the guide down.

   REAR (outboard seats)

   Press and hold the belt guide as illustrated and adjust the height as required.
3. *Release the belt guide at the required position, ensuring that it has clicked into position.*
4. *Shorter people should select a lower belt guide position and taller people should select a higher one. This ensures, for both safety and comfort, that the webbing of the seat belt fits over the shoulder.*

Note: *Do not adjust the seat belt height while driving.*

SEAT BELTS cont.

Australian law requires that the driver and all passengers be properly restrained at all times with the seat belts provided in the vehicle. Failure to do so could increase the chance of injury and / or the severity of injury in accidents.

WARNING:

- **Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.**
- **Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.**
- **Care should be taken to avoid contamination of the webbing with polishes, oil and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.**
- **It is essential to replace the entire assembly after it has been worn in a severe impact, even if damage to the assembly is not obvious. Belts should not be worn with straps twisted.**
- **Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.**
- **No modification or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.**
- **The positioning of the tongue restrictor must never interfere with, or stop, the belt from fully retracting.**
- **On pregnant women in particular, the lap belt must be positioned as low as possible across the pelvis so as not to put too much pressure on the abdomen.**
- **The centre seat belt locks if the centre seat is not secured in the vertical position.**

CHILD RESTRAINTS

Child restraints

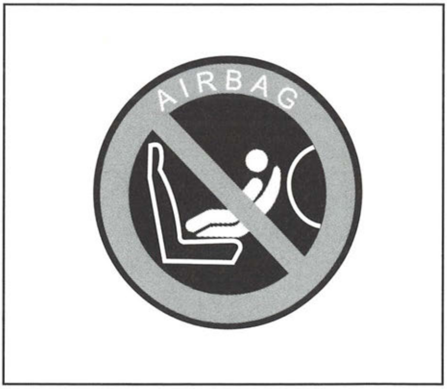
Always ensure that the seat belt fits firmly around the child restraint. If a child cannot see out of the window, do not raise the child by means of an ordinary cushion. It will not stay in place in a collision and the child can slip out of the straps and become entangled.

WARNING:

- **Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.**
- **Only child restraints that have clips to attach to the vehicle's anchorage fittings are to be used (refer to the illustrations on the following pages).**
- **Earlier types of child restraints may not attach securely to this type of anchor and should not be used.**
- **Only Standards Australia approved child restraint harnesses should be used. You should only purchase a child restraint which carries the appropriate Standards Australia sticker of approval.**
- **Do not fit unauthorised covers as they may impair the deployment of the side impact airbags. Do not position your body or any object (including pillows) between fronts seats and doors. Front seat occupants should not lean on or sleep against the door. Always sit centrally in the seat. (Refer to Airbags in Chapter 6.)**

WARNING – EXTREME HAZARD:

- **Do not use a rearward facing child restraint on a seat protected by an airbag in front of it. The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.**
- **NEVER install a child restraint in the front seat of a vehicle fitted with side impact airbags. Remember that it is safest for children to be seated in the rear seats.**



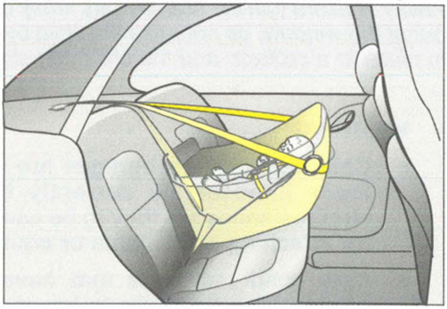
WHICH TYPE OF CHILD RESTRAINT FOR YOUR CHILD?

Children should be restrained at all times and fitted with a child restraint appropriate to their size when travelling in a vehicle. Following are some guidelines about selecting the appropriate restraint for your child.

Infants

Rearward facing infant capsule		
WEIGHT	**HEIGHT**	**APPROX. AGE**
Less than 9 kg	Less than 70 cm	Up to 6 mths

Designed so that in the event of a collision, impact forces will be evenly spread over the baby's back, with minimal jarring to the vulnerable head and neck area.

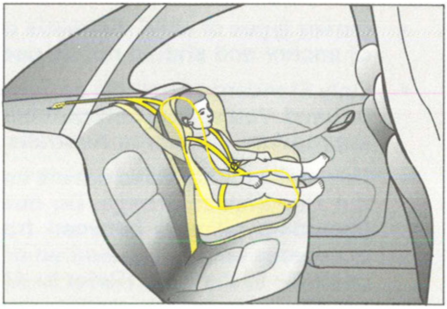


Rearward facing infant capsule

Young children

Forward facing child seat		
WEIGHT	**HEIGHT**	**APPROX. AGE**
8 to 18 kg	70 to 100 cm	6 mths to 4 yrs

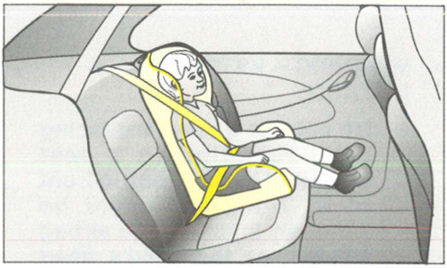
For use when the child is able to sit and easily hold his or her head upright. It is also possible to purchase convertible seats which can be used as a rearward facing child restraint or converted to a forward facing child seat.



Forward facing child seat

Booster seat with lap / sash seat belt		
WEIGHT	**HEIGHT**	**APPROX. AGE**
–	More than 100 cm	4 to 10 yrs

When children outgrow a typical forward-facing child seat but they are still too small for lap-sash seat belts. A booster seat raises the child so that the knees bend comfortably, the lap-sash seat belt is correctly positioned and the child can see out the window. A rigid booster seat with a back, side wings and sash guide gives the best protection. In assessing the range of children who would benefit from booster seats, height is a better indicator than age or weight.

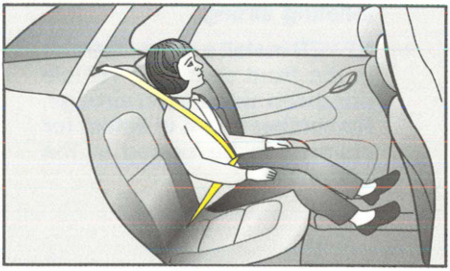


Booster seat with lap-sash seat belt

Older children

A child should use a normal lap-sash seat belt only when:

- *he / she can sit against the back of the rear seat with knees bent comfortably at the edge of the seat,*
- *lap belt rests low and snug across the hips – not across the stomach,*
- *sash belt is centred on shoulder and chest,*
- *he/she is able to stay seated like this for the entire trip.*



Adult lap-sash seat belt

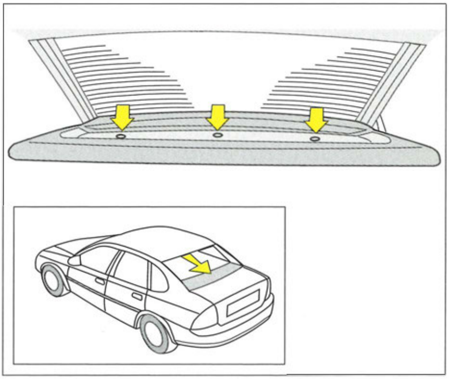
CHILD RESTRAINTS cont.

Sedan model

Three anchorage positions are provided in the area behind the rear seats, as illustrated. One anchorage fitting is installed in the centre position, protected by a flip top cover.

If you wish to use a child restraint in either of the outer positions, first lift the flip top cover in the outer position. The existing anchorage fitting (supplied in the centre position) can then be moved to an outer anchorage position.

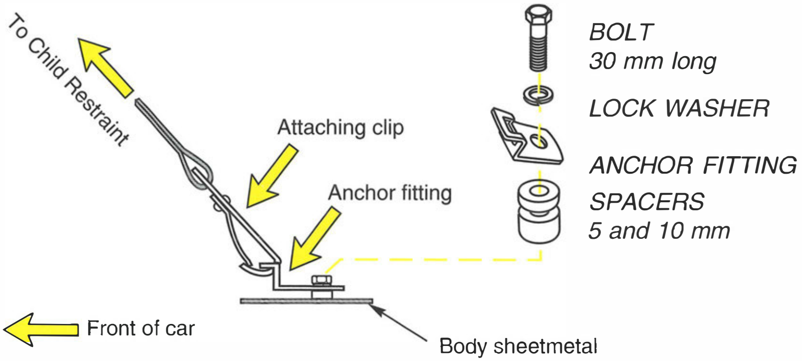
Alternatively, an additional anchorage fitting can be installed using the bolt, spacers and washer supplied.



Note: *Remove the cover cap from the restraint assembly if the Holden accessory rear blind is fitted.*

Ensure that the bolts are securely tightened to 15 – 25 Nm (Newton metres). Check with your Holden Retailer if you are unsure.

Sedan

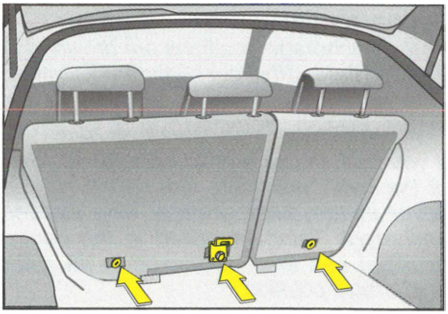

To Child Restraint
Attaching clip
Anchor fitting
Front of car
Body sheetmetal
BOLT
30 mm long
LOCK WASHER
ANCHOR FITTING
SPACERS
5 and 10 mm

CHILD RESTRAINTS cont.

Hatch model

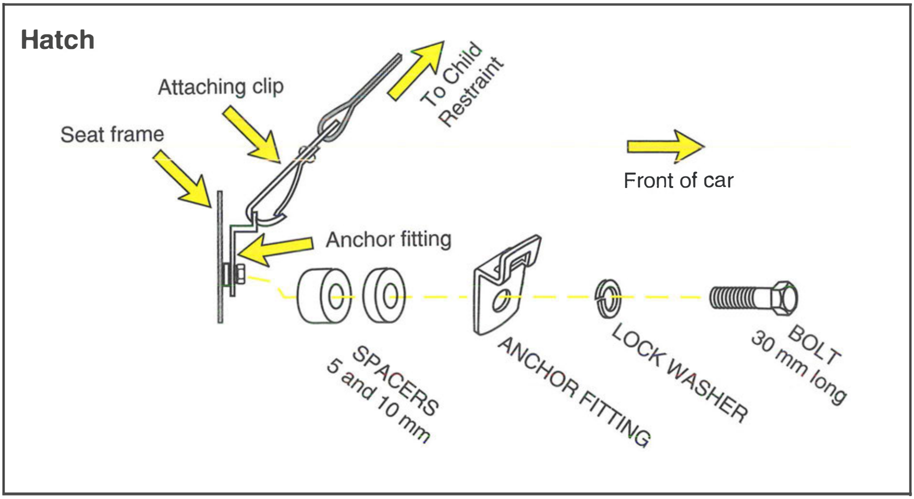
Three anchorage positions are provided on the rear seat-backs, as illustrated. One anchorage fitting is installed in the centre position.

If you wish to use a child restraint in either of the outer positions, first remove the cover plug from the outer position. The existing anchorage fitting (supplied in the centre position) can then be moved to an outer anchorage position.



Alternatively, an additional anchorage fitting can be installed using the bolt, spacers and washer supplied.

Ensure that the bolts are securely tightened to 15 – 25 Nm (Newton metres). Check with your Holden Retailer if you are unsure.


Hatch
Attaching clip
Seat frame
To Child Restraint
Front of car
Anchor fitting
SPACERS 5 and 10 mm
ANCHOR FITTING
LOCK WASHER
BOLT 30 mm long

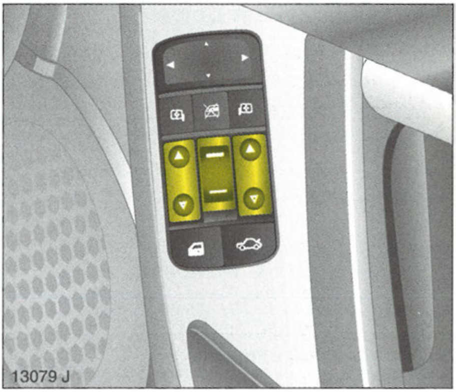
ELECTRIC WINDOWS

Switches

The control panel in the driver's door incorporates the following window switches:

- *Two rocker buttons (to raise and lower the window).*
- *A slider (to toggle between the front and rear windows).*
- *A safety switch (to deactivate the rear window switches).*

Additional rocker switches are located in the passenger doors.



Operation

The windows can be operated:

- *when the ignition is on*
- *within 10 minutes of switching the ignition off*
- *within 10 minutes of opening or closing the driver's door*
- *within 10 minutes of inserting or removing the ignition key.*

The windows cannot be operated after the vehicle has been locked with the remote control.

To move a window in stages, tap the appropriate window rocker switch. For automatic opening or closing, keep the switch pressed for slightly longer. To stop automatic operation, tap the switch.

When using the driver's door window switches, position the slider to select front or rear windows (up = front windows and down = rear windows). Then operate the left or right rocker switch to adjust the corresponding window.

Protective system

If the window glass encounters resistance during the last stages of automatic closing, movement is immediately stopped and the window opens slightly.

Interruption of power supply

Automatic opening and closing of the windows may not be possible after an interruption of the power supply (battery / fuse) or low voltage. After the problem has been fixed, reprogram the windows as follows:

1. *Close the doors.*
2. *Switch on the ignition.*
3. *Close each window and hold the up button for at least a further 3 seconds.*

WARNING:

To avoid risk to children (through incorrect use of electric windows), the key should be removed from the ignition when leaving the vehicle.

ELECTRIC WINDOWS cont.

Operating the windows from outside

The windows can be opened or closed from outside of the vehicle by using either the key remote functions, or the key in the driver's door lock.

TO OPEN

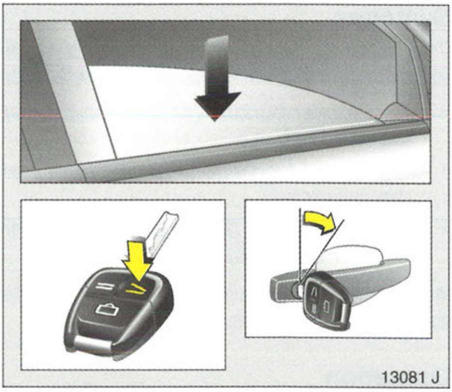
- *Press the ≧ button on the remote control until the windows are open.*
- *Hold the key in the driver's door lock in the door unlocking position until the windows are open.*

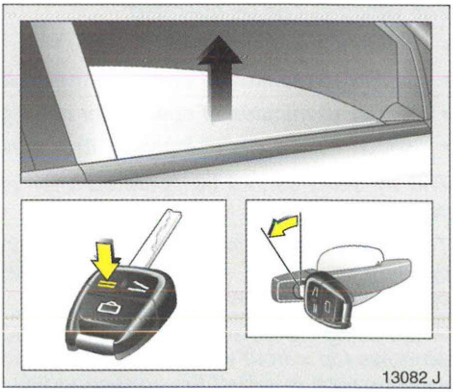
TO CLOSE

- *Press the = button on the remote control until the windows are closed.*
- *Hold the key in the driver's door lock in the door locking position until the windows are closed.*

OVERLOAD

If the system is overloaded, the power supply is cut-off for a short time before being restored.


13081 J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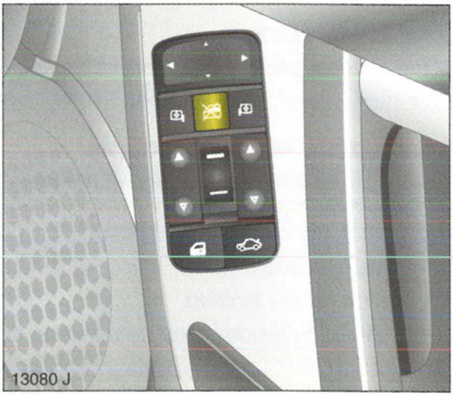
SAFETY SWITCH

The window switches in the rear doors can be disabled by engaging the safety switch, located in the driver's door control panel.

Press the safety switch. The switch illuminates and the rear switches are disabled.

Press the safety switch again to enable the rear window switches.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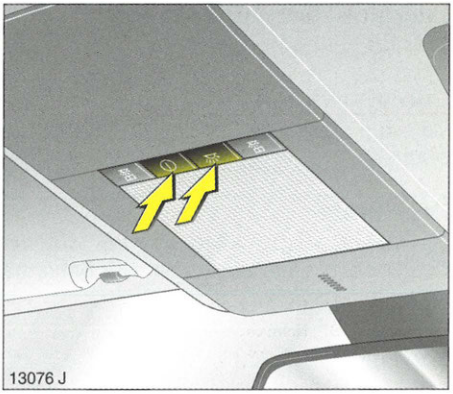
INTERIOR LIGHTS

Front interior light

The interior light illuminates when a door is opened. Once the doors are closed, the light turns off after a delay.

To cancel the delay, press the ☼ button.

To switch on the interior light while the doors are closed, push the Ⓘ button.

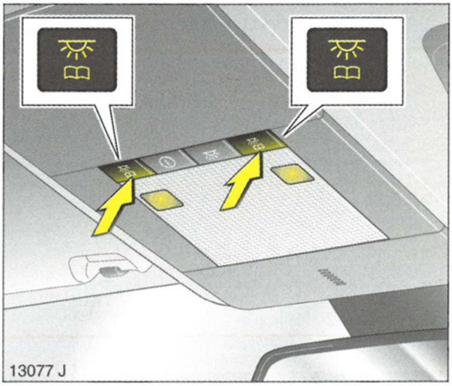


Front reading lights (if fitted)

The front reading lights can be operated independently.

Press the 📖 button to switch on a front reading light.

Press the same 📖 button again to switch off the light.

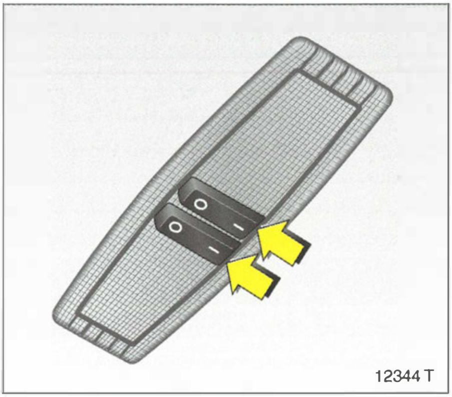


Rear reading lights (if fitted)

The rear light illuminates when a rear door is opened and the rear light switch is set to the centre position.

Press the **I** *button to switch on the light.*

Press the **O** *button to switch off the light.*



Glovebox light

The glovebox light illuminates when the glovebox lid is opened.

INTERIOR LIGHTS AND PARK BRAKE

Luggage compartment light

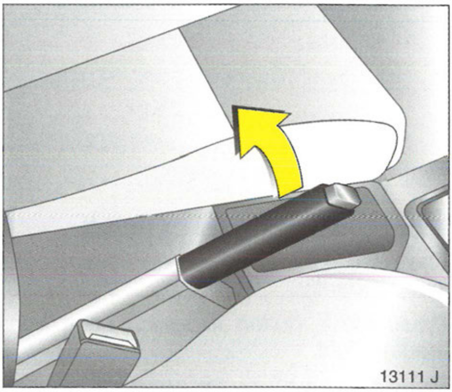
The luggage compartment light illuminates when the boot lid / tailgate is opened.

Sun visor lights

The sun visor lights illuminate when the flap covering the mirror on the sun visor is opened.

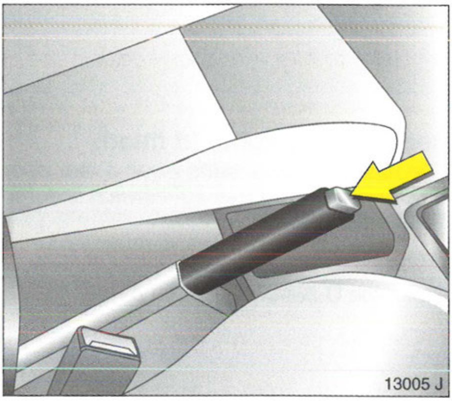
Park brake

To apply the park brake, pull the lever up firmly. On slopes, apply the park brake as firmly as possible.



To release the park brake, pull the lever slightly upwards, press the release button in as illustrated and fully lower the lever.

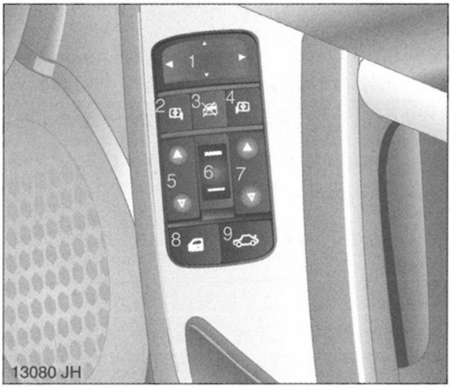
Never drive the vehicle with the park brake applied.



DRIVER'S DOOR SWITCHES

Switch panel

The switch panel in the driver's door includes the following switches:



1 Four-way mirror adjustment switch.

Refer to Chapter 3, Mirrors.

2 Left-side mirror selection switch.

Refer to Chapter 3, Mirrors.

3 Rear-window isolation switch.

Refer to Chapter 3, Windows.

4 Right-side mirror selection switch.

Refer to Chapter 3, Mirrors.

5 Left-side window rocker switch.

Refer to Chapter 3, Windows.

6 Front / rear window selection switch.

Refer to Chapter 3, Windows.

7 Right-side window rocker switch.

Refer to Chapter 3, Windows.

8 All-doors switch.

Refer to Chapter 2, All doors switch.

9 Boot lock switch.

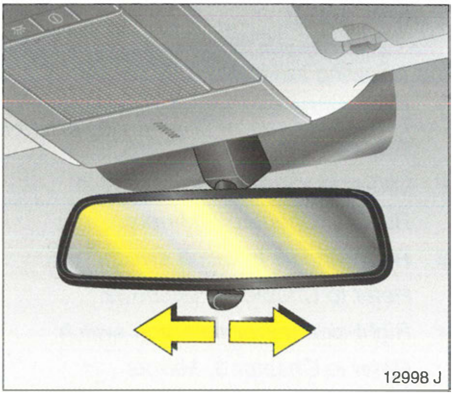
Refer to Miscellaneous Locks in this chapter.

MIRRORS

Internal rear view mirror

Grasp the mirror and swivel it to adjust the rear view.

Toggle the lever on the lower edge of the mirror to reduce the dazzle from following vehicle headlights, especially at night.

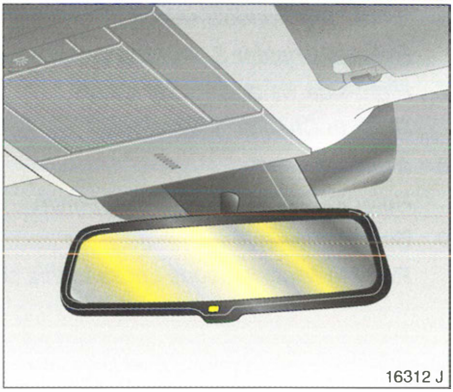


Light sensitive mirrors - internal and exterior driver's side (if fitted)

The internal rear view mirror and driver's side exterior mirror adjust automatically at night to reduce the dazzle from following vehicle headlights.

The mirrors do not dip to prevent dazzle if:

- *the ignition switch is off*
- *reverse gear is engaged or selector lever is set to* **R**
- *the interior lights are on*
- *a door is open.*



MIRRORS cont.

Exterior mirrors

The driver's door control panel incorporates three mirror adjustment switches:

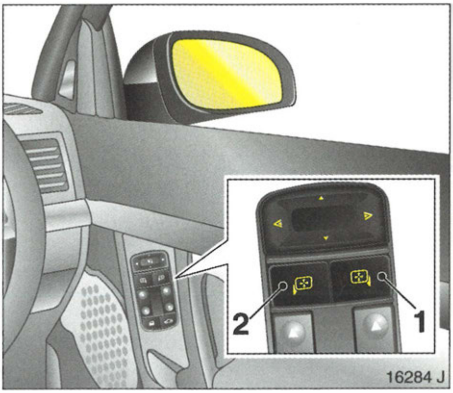
- *Four-way rocker*
- **1** - *Driver and passenger side exterior mirror selection.*
- **2** - *Passenger side exterior mirror selection.*

If the exterior mirror switch **1** *is pressed, the four-way rocker switch adjusts the driver and passenger side exterior mirrors*

If the exterior mirror switch **2** *is pressed, the four-way rocker switch adjusts the passenger side exterior mirror only.*

Vehicles with electric seat adjustment only:-

If the exterior mirror switch **2** *is pressed and reverse gear is selected, the exterior passenger mirror automatically points at the rear tyres to assist with parking (does not operate if a trailer is attached).*



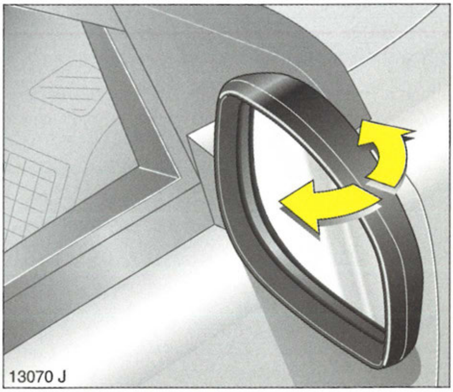
WARNING:

The passenger-side exterior mirror is convex shaped, which makes objects appear further away than they actually are.

Safety

For the safety of pedestrians, the exterior mirrors swing out of the normal mounting position under impact.

Move the mirrors back into position by applying slight pressure to the housing.



Mirror demisting

Demisting of the exterior mirrors is provided when the rear window demister is switched on. Refer to Chapter 1.

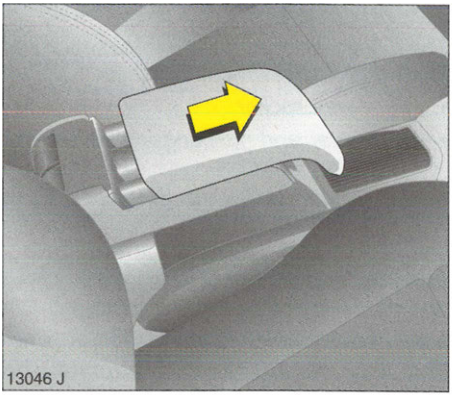
FRONT ARMREST AND ACCESSORY SOCKET

Adjustment

The front armrest is located between the front seats. It can be lowered and adjusted forward or can be pushed back and folded away.

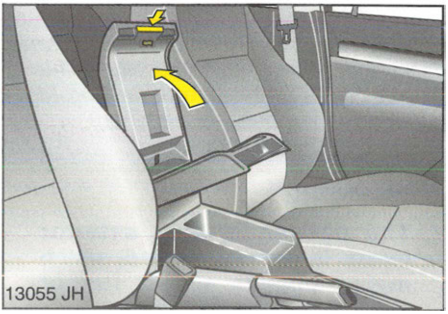
In the lowered position, the armrest can be pushed forward, as illustrated.

If the armrest is not required, push it back and fold it up.



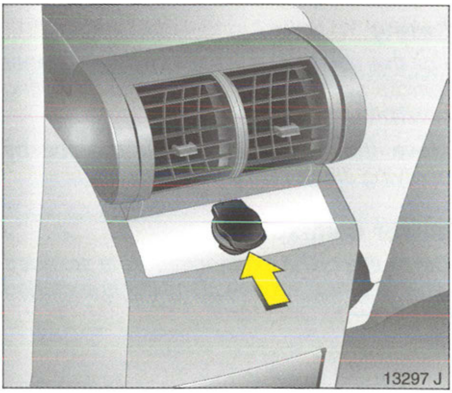
The armrest features two storage compartments: one in the lid and one under the lid.

To open the storage compartment in the lid, slide the armrest back, press the button on the front of the lid and lift, as illustrated.



Accessory socket

The accessory socket is fitted in the rear centre console.



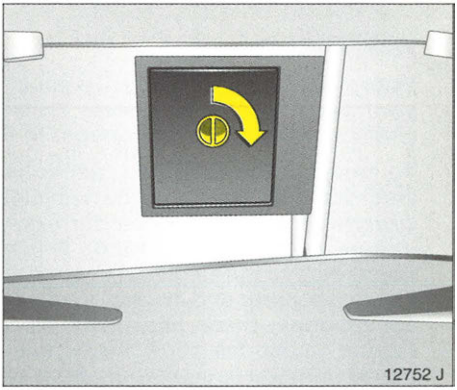
LUGGAGE COMPARTMENT ENLARGEMENT

Transporting long objects – Sedan

The armrest and the cover behind the armrest can be lowered to enable transporting of long objects. The outer seats can continue to be used for passengers.

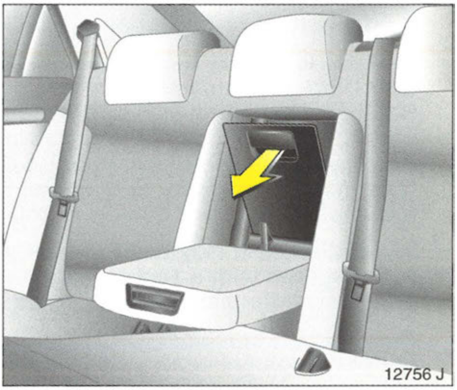
Refer to Chapter 10.

- *Ensure that the armrest cover is unlocked. (With the handle in the vertical position.)*



- *Fold the centre armrest onto the seat cushion.*
- *Pull the armrest cover handle to release the cover and lower the cover as illustrated.*

To close the cover, follow this procedure in the reverse order.

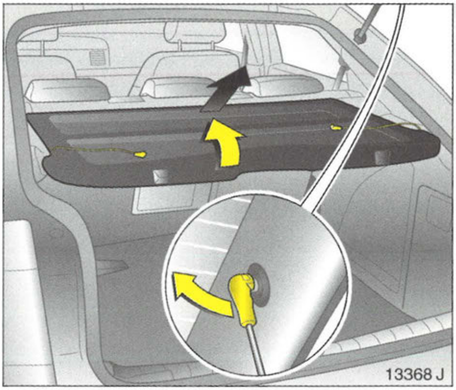


Transporting tall objects – Hatch

Remove the rear compartment shelf in the luggage compartment to transport tall objects.

- *Open the tailgate.*
- *Unhook the rear compartment shelf retaining cord, as illustrated.*
- *Remove the rear compartment shelf from the side guides and lift it out.*

To install the rear compartment cover, follow this procedure in the reverse order.



Note: *Avoid transporting bulky objects that cause the tailgate to be open or ajar. This can allow exhaust fumes to enter the vehicle.*

ELECTRICAL SYSTEM WARNING

WARNING:

Your vehicle is equipped with a highly sophisticated, electronically controlled electrical system called CANBus. This system constantly checks connected components in the vehicle for correct operation.

To carry out its designed functions, CANBus needs to recognise all the electrical equipment in the vehicle, including any aftermarket electrical equipment or accessories (for example, a tow bar harness, LPG kit or an integrated mobile telephone). This requires all of these components to be connected to the electrical system via purpose built interfaces. For Holden approved parts and accessories and some other non-approved parts and accessories, these interfaces are available from your Holden Retailer. Failure to use the correct interfaces may affect CANBus performance or cause damage to your equipment and / or to the vehicle. Such failure may also affect your New Vehicle Warranty to the extent that Holden considers it affects the specifications or quality of your vehicle.

In order to ensure the correct function of CANBus, Holden recommends that Holden approved parts and accessories are fitted by your Holden Retailer. The use of non-approved parts and accessories may affect the correct function of CANBus and an interface for such parts and accessories may not be available from your Holden Retailer. This may also affect your New Vehicle Warranty to the extent that Holden considers that it affects the specifications or quality of your vehicle.

In addition, you may need to visit your Holden Retailer to have CANBus reconfigured with a Tech 2 diagnostic tool to have the system recognise your new equipment. Please contact your Holden Retailer for details.

Provided the combined load of such equipment does not exceed 30 amps, minor equipment can be safely connected via the accessory socket in the rear of the front console and / or the cigarette lighter socket.

CHAPTER 4

Driving

Page
4-2 Engine starting
Running-in
4-3 Safety
4-4 Automatic transmission
4-8 Manual transmission
4-10 Driving precautions
4-11 Driving precautions – tyres
4-12 Anti-lock brake system
4-13 Traction Control
4-14 Electronic stability program

ENGINE STARTING

Starting the engine

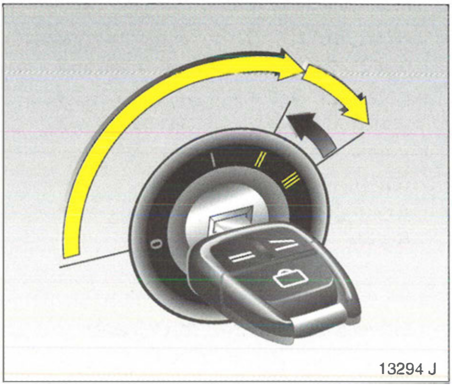
1. *Apply the park brake firmly. Release it only after you have started the engine and are ready to drive off.*
2. *MANUAL: Press the clutch pedal and move the shift lever to neutral.*

   The clutch pedal can now be released.

   AUTOMATIC: Move the shift lever to **P** *(park) or* **N** *(neutral).*

   Note: *The ignition must be on and the brake pedal pressed to enable the shift lever to be moved away from* **P** *(park).*
3. *Keep your foot off the accelerator pedal prior to and during starting. Pressing the accelerator pedal increases cranking time. It does not help the engine to start.*
4. *For both cold and hot starting:*

   Turn the key to **III** *only until the engine starts, then release the key.*



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If the engine will not start after 15 seconds of cranking, wait approximately 15 seconds before trying again. This allows the starter motor to cool.

If the engine will not start and the immobiliser light (🔒) in the tachometer display window is illuminated, turn the ignition off for at least 2 seconds and try again.

If the engine still fails to start, consult a Holden Retailer.

Running-in (for the first 1000 km especially)

The future performance and reliability of the engine depends largely on the care and restraint that you exercise during running in.

- *After starting, do not race the engine; gradually warm it up.*
- *Start off slowly from a standstill.*
- *Drive your vehicle at various speeds. This improves the bedding-in of parts.*

  Note: *Do not use full throttle and do not allow the engine to labour.*
- *Make good use of all of the gears. Press the accelerator pedal only up to 75 percent of full travel in all gears and drive ranges.*
- *Avoid hard braking during the first 200 km (and after new brake pads are fitted).*

Switching off the engine

If the engine temperature is very high (for example, after driving in hilly areas) then allow the engine to idle for approximately 2 minutes before switching it off. This helps prevent heat accumulation. When the engine is hot, the cooling fan may remain on for several minutes after the ignition is turned off.

SAFETY

Before entering the vehicle

- *Check that the windows, mirrors and lights are clean.*
- *Check that the tyres are not flat.*

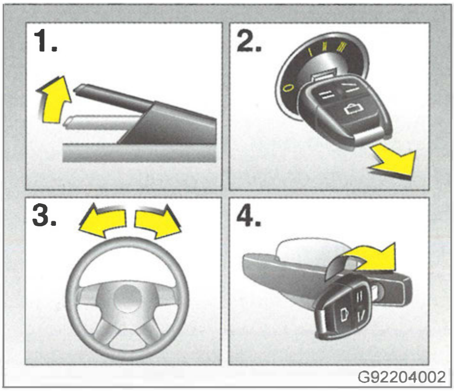
Before driving off

1. *Be sure that all of the doors are secured.*
2. *Position your seat for comfortable driving.*
3. *Adjust the rear view mirrors.*
4. *FASTEN SEAT BELTS.*
5. *Check that the warning indicators illuminate when you turn the key to start the engine. Refer to Chapter 1.*

   AUTOMATIC: To move the shift lever away from **P** *(park), the brake pedal must be pressed and the ignition switched on.*

   MANUAL: When starting off on a very steep hill, it may be helpful to turn traction control off. Refer to Traction Control in this chapter.

Parking



1. *Set the shift lever and apply the park brake.*

   AUTOMATIC TRANSMISSION

   Move the shift lever to **P** *(park).*

   Note: *The key can only be removed when the transmission is in* **P***.*

   MANUAL TRANSMISSION

   Move the shift lever to **1** *(first) or* **R** *(reverse).*
2. *Turn off the engine.*
3. *Turn the ignition key to* **0** *and remove the key.*

   Remember to shut the windows and switch off the exterior lights.
4. *Swivel the steering wheel to apply the steering lock.*
5. *Lock the vehicle when leaving it.*

WARNING:

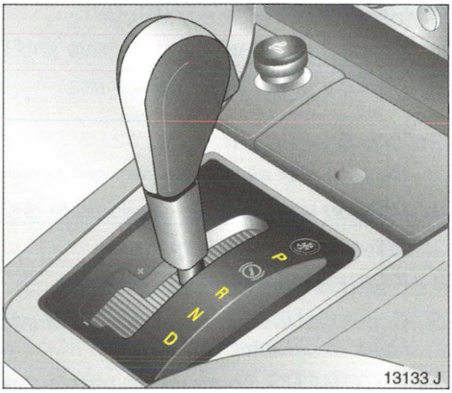
- **Be careful where you park or drive. As with any vehicle, do not park or operate this vehicle in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.**
- **Never leave the engine running in an enclosed space such as a closed garage or underground car park.**

AUTOMATIC TRANSMISSION

The shift lever is located between the front seats. Lift the release knob below the lever handle to shift it into position.

WARNING:

To move the shift lever out of P (park), the brake pedal must be pressed and the ignition on. The shift lever must be in P to remove the key from the ignition switch.

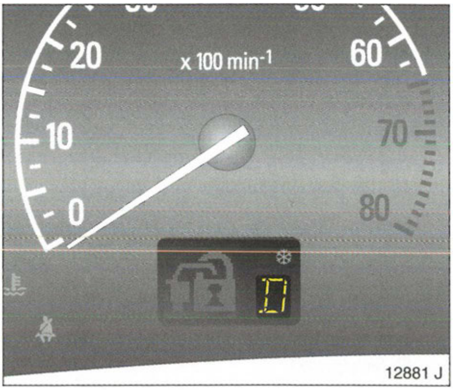


The transmission changes gears automatically when in automatic mode. The driver can change gears manually using the manual mode.

Move the shift lever to **D** *(Drive) in the right-hand side position to select automatic mode or to the left-hand side* **D** *position to select manual mode.*

Shift lever position indicator

The right-hand side of the tachometer display window shows the currently engaged gear or mode.



P *Park position*

R *Reverse gear*

N *Neutral or idling position*

D *Automatic mode*

1–5 *Manual mode, selected gear.*

Automatic mode

Automatic mode includes the following positions:

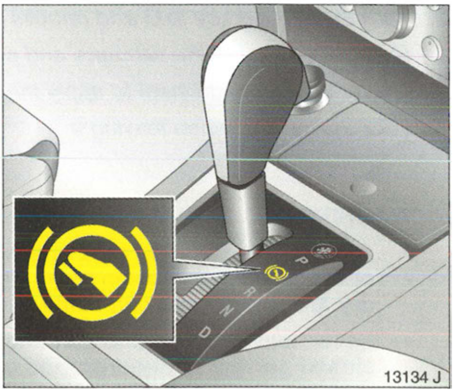
P *Park position*

R *Reverse gear*

N *Neutral or idling position*

D *Drive position for normal driving conditions in 1st to 5th gear.*

The ⊚ *light illuminates beside the shift lever when either* **P** *or* **N** *is selected.*



AUTOMATIC TRANSMISSION cont.

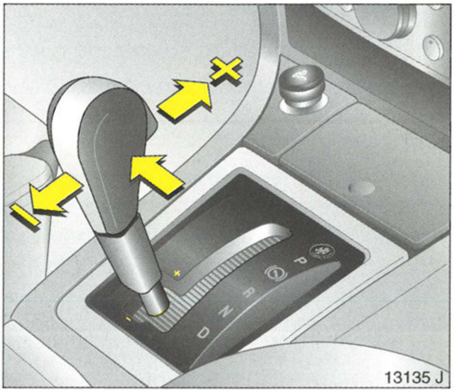
Manual mode

Manual mode enables the driver to change gears as follows:

- + *Shift to a higher gear.*
- – *Shift to a lower gear.*

If a higher gear is selected when the vehicle speed is too low or a lower gear when the vehicle speed is too high, the gear will not change. This prevents the engine from running at too low or too high rpm.

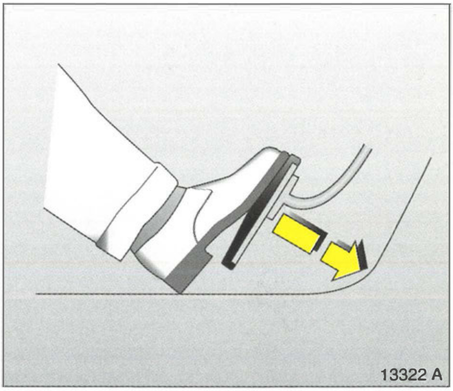
If the engine speed is too low but a lower gear has not been selected, the transmission will automatically shift to a lower gear. However, if the engine speed is too high, the transmission will not automatically shift to a higher gear.



Kickdown

To activate the kickdown function, press the accelerator pedal past its resistance point. Depending on the engine speed, the transmission shifts to a lower gear, which enables maximum acceleration.

This function is operational in both automatic and manual modes.



Winter program

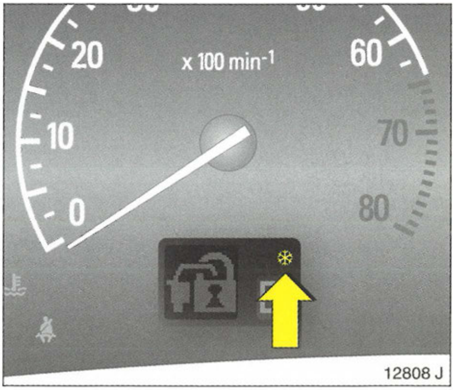
Use the winter program when driving on slippery or muddy roads. This holds the transmission in fourth gear, which provides better traction and safer vehicle operation.

To activate the winter program, ensure that the shift lever is in **D** *and press the* ❄ *button, located on the right-hand side of the shift lever. The* ❄ *light illuminates in the tachometer window when this program is active.*

To deactivate the winter program, either:

- *press the* ❄ *button again*
- *switch off the ignition*
- *move the shift lever to manual mode.*

The winter program automatically deactivates at very high transmission oil temperatures.



AUTOMATIC TRANSMISSION cont.

Engine braking

Automatic transmission selects the driving program for optimum engine braking.

If required, lower gears can be manually selected to increase the engine braking effect.

Note: *First gear has the greatest engine braking effect.*

Rocking the vehicle

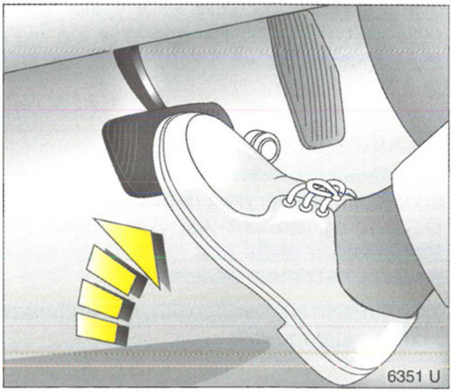
It may become necessary to 'rock' the vehicle if it is stuck in sand, mud or snow. To rock the vehicle, move the shift lever from **D** *(drive) to* **R** *(reverse) repeatedly while applying light pressure to the accelerator pedal. Do not race the engine and avoid sudden acceleration.*

Note: *This applies only to the exceptional circumstances mentioned above.*

Manoeuvring the vehicle

To manoeuvre the vehicle back and forth (when parking, for instance) use the automatic vehicle movement that occurs when the brake pedal is released.

Note: *Do not press the accelerator and brake pedals simultaneously.*



Note:

- *The shift lever can be left in the chosen gear with the engine running.*
- *When stopping on gradients, apply the park brake or press the brake pedal.*
- *To prevent overheating of the transmission, do not increase the engine speed while the vehicle is stationary and a gear has been selected.*
- *Switch off the engine if stopping for a lengthy period, for example in traffic jams or at level crossings.*
- *Before leaving the vehicle, apply the park brake, place the shift lever in* **P** *(park) and remove the ignition key. (The ignition key can be removed only when the shift lever is in* **P***.)*
- *If the shift lever is not in* **P** *when the ignition is switched off, the* (⊘) *light flashes.*
- *The battery may discharge if the vehicle is left for a lengthy period of time with the ignition key left in the ignition switch.*

AUTOMATIC TRANSMISSION cont.

Neutral idle control

This feature is designed to reduce fuel consumption. When the vehicle is stationary with brakes applied and a forward gear selected, the transmission temporarily shifts to neutral (regardless of the shift lever position). The automatic neutral shift function is activated when:

- *the shift lever is in* **D** *or manual mode*
- *the foot brake is engaged*
- *the vehicle is stationary*
- *the accelerator pedal is not pressed*
- *the transmission oil temperature is greater than 0°C.*

Once the brake is released and the accelerator pedal is engaged, the automatic neutral shift function is deactivated and the vehicle moves off in the usual manner.

Cold start operation

When the engine is cold, the operating temperature program delays the gear shifting allowing higher engine speeds. This quickly brings the catalytic converter to the optimum temperature for pollutant reduction.

Adaptive shift programs

These programs automatically adapt the timing of gear shifting to suit driving style:

- *Sporty driving style. Gear shifts occur at higher engine speeds.*
- *Economical driving style. Gear shifts occur at lower engine speeds.*
- *Special driving conditions such as driving up and down hills, towing a caravan or trailer or driving with a heavy load. Gear shifts occur based on the specific situation.*

Fault mode

In the event of a fault, the ⚙ light illuminates and the transmission no longer shifts automatically. Driving can be continued in manual mode with the limited selection of second gear and fifth gear. In automatic mode, the following positions can be selected:

D	*5th gear*
N	*Neutral*
R	*Reverse*
P	*Park.*

Have the system checked at a Holden Retailer as soon as possible after..

Shift lever locked in P

If the vehicle battery is flat, the electric park lock prevents the shift lever from being moved away from **P** *(park). Refer to Chapter 6.*

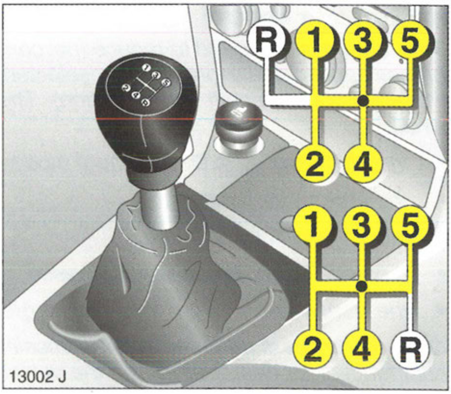
MANUAL TRANSMISSION

The manual transmission has five forward gears and a reverse gear.

The shift pattern applying to your vehicle is illustrated on the top of the shift lever.

When selecting fifth gear, push the lever to the right against slight spring pressure throughout the shift operation.

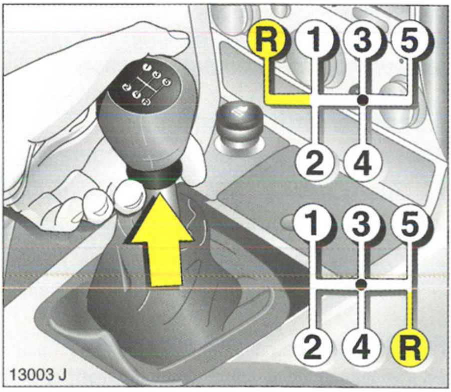
When shifting from fifth to fourth gear, do not exert pressure to the left.



Ensure the vehicle is stationary before selecting reverse gear.

To select reverse gear, lift the ring beneath the knob on the shift lever and move the lever into the reverse position.

If the gear does not engage easily, press the clutch pedal again or select a different gear before again trying to select reverse.



MANUAL TRANSMISSION cont.

Operating notes

- *When shifting from one gear to another, be sure to press the clutch pedal fully to avoid clashing and possible chipping of the transmission gears.*
- *Never attempt to engage reverse gear until the vehicle has completely stopped. A slight pause between pressing the clutch pedal and moving into reverse gear is desirable to allow the rotating components to stop. Whenever reverse gear is selected with the ignition on, the reverse lights illuminate.*
- *Move the shift lever using moderate effort, allowing time for the transmission synchronisers to work properly.*
- *Do not drive with your foot resting on the clutch pedal. This causes substantial clutch wear.*
- *When stopped on an incline, do not hold the vehicle by slipping the clutch. Use the park brake or brake pedal.*
- *To maintain safe speeds on a steep downgrade and to reduce brake wear and overheating, shift to a lower gear before starting the descent.*
- *Do not overspeed the engine when shifting down to the next lowest gear.*
- *When starting off on a very steep hill, it may be helpful to turn traction control off. Refer to Traction Control in this chapter.*

DRIVING PRECAUTIONS

Brakes

- *Power assisted brakes, which are fitted to your vehicle, use vacuum from the engine when it is running. Do not let the vehicle run downhill without the engine running.*
- *Driving through water may affect the performance of the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry the brakes quickly, lightly apply the brakes while maintaining a slow forward speed with an assured clear distance ahead, until brake performance returns to normal.*
- *Do not obstruct the brake pedal with ill-fitting floor mats or any other material causing interference with normal pedal movement.*
- *Position your seat so that you can correctly press the brake pedal.*

Power steering

If the power steering is rendered ineffective because the engine has stalled, the drive belt has broken or the pump fluid reservoir is empty, the vehicle can still be steered. However, due to the much greater effort required to steer, it is recommended that you have the problem fixed promptly.

Loose articles

Do not leave loose articles or luggage in the passenger compartment. Whenever possible, loads stowed in the luggage compartment should be firmly secured.

WARNING:

Gas cylinders can leak, creating a risk of fire or explosion. As a precaution, ensure adequate ventilation when carrying gas cylinders. They must be restrained from rolling around, and where possible, placed in the load area of the vehicle. It is recommended that if gas cylinders are frequently transported that a purpose-built carrying compartment be used. Transportation of gas cylinders is regulated by legislation in some states.

Loading the vehicle

Loading the vehicle changes the mass distribution and therefore the handling of the vehicle when driving. After loading the vehicle, extra care should be taken to become familiar with the handling and feel of the vehicle. Refer to Chapter 10.

Battery care whilst driving

When driving slowly or when the vehicle is stationary (for example, in slow traffic, stop-and-go traffic or traffic jams), turn off all unnecessary electrical loads where possible (heated rear window, auxiliary headlights etcetera).

When starting the engine, press the clutch to negate any transmission resistance so that the starter motor will require less power.

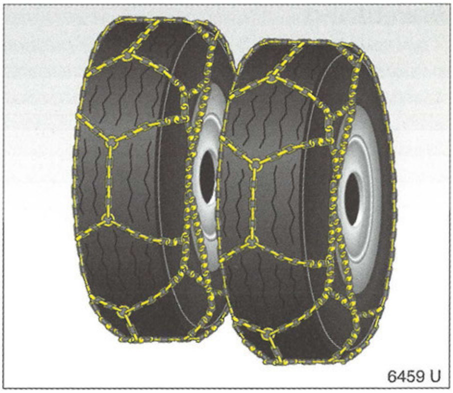
Driving in mountainous terrain or with a trailer / caravan

The cooling fan is driven electrically and so its cooling capacity is not dependent on the engine speed. At high engine speeds, a lot of heat is produced and at low engine speeds, less heat is produced. When driving uphill, therefore, do not shift down into a lower gear when the vehicle can still climb the hill in the higher gear.

DRIVING PRECAUTIONS – TYRES

Snow chains (215/55 R16 tyres)

- *Vectras are front wheel drive vehicles and as such, snow chains are only fitted on the front (driving) wheels.*
- *Only fine-linked chains, not protruding more than 15 mm on the tyre tread and inside of the tyre (including the chain lock) should be used.*
- *If the hub cap comes into contact with parts of the chain, remove the hub cap.*



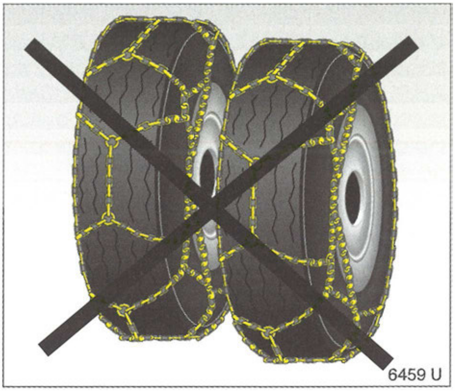
WARNING:

Use tyre chains at speeds only up to 50 km/h. When travelling on roads that are free of snow, chains should only be used for brief periods since they are subject to rapid wear on hard surfaces and may snap.

Snow chains (215/50 R17 tyres)

Some Vectra models have 215/50 R17 tyres fitted as standard.

Due to a lack of wheel clearance, snow chains are not to be fitted to these tyres.



Tyre traction

A decrease in tyre grip occurs when water, snow, ice, gravel or other materials are on the road. Driving practices and vehicle speed should be adjusted according to the road conditions.

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as aquaplaning, may cause partial or complete loss of grip, which affects steering and braking. To reduce the possibility of aquaplaning:

- *reduce speeds during rainstorms*
- *replace tyres when tread wear indicators are visible*
- *regularly check that tyres are properly inflated.*

ANTI-LOCK BRAKE SYSTEM

Monitoring

The Anti-lock Brake System (ABS) continuously monitors the vehicle brake system and prevents the wheels from locking, irrespective of the road conditions and tyre grip. It starts to regulate the braking pressure as soon as a wheel shows a tendency to lock. The vehicle remains steerable even in the event of panic braking, for instance when swerving to avoid an obstacle or on bends.

Note: *Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.*

The braking effect is regulated by the ABS every millisecond during braking.

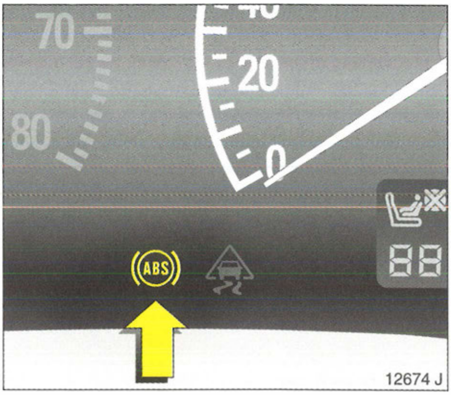
Operation

When active, ABS operation is noticeable by pulsing of the brake pedal and the noise of the regulation process. To achieve optimum braking, keep the brake pedal pressed fully throughout the braking process. Use this as a reminder to match your speed to the road conditions, even though ABS is keeping control of the braking.

In an emergency braking situation, keep full force on the brake pedal without pumping it. Pumping the brake pedal can reduce brake efficiency when ABS is controlling the braking.

When the ignition is switched on, the (ABS) light in the instrument panel illuminates for several seconds while the system performs a self-check. The self-check may be audible.

If the (ABS) light does not go out or if it comes on during driving, there is a defect in the ABS. The brake system remains operational but without ABS assistance. Have your Holden Retailer check the system as soon as possible.



TRACTION CONTROL

Operation

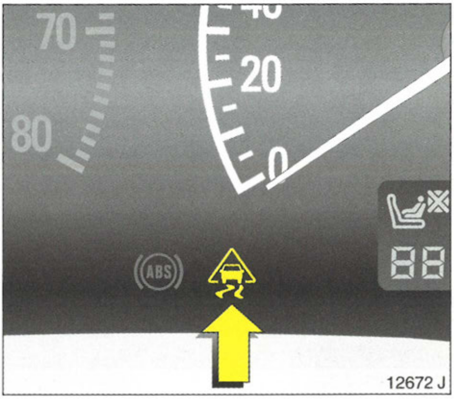
Traction control helps prevent the driving wheels from spinning, irrespective of the road conditions and tyre grip. As soon as at least one driving wheel starts to spin, traction control reduces engine output and applies the brakes to the spinning wheel, as necessary. This can improve the vehicle steering control and driving power, particularly on snow and ice, as well as on wet or slippery roads.

Traction control helps you to keep control of the vehicle and reminds you to match your speed to the road conditions.

Note: *Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.*

The ⚠ light on the instrument panel illuminates for a few seconds when the ignition is switched on. If ⚠ does not illuminate or if it illuminates during driving, a fault is indicated in the system and traction control will not be operational. Have your Holden Retailer check the system.

The ⚠ light on the instrument panel flashes when the traction control system is operating, indicating that the vehicle is in a critical situation. When this occurs, engine output may be reduced (the sound of the engine may change) and the vehicle may be braked automatically to a small degree.



ELECTRONIC STABILITY PROGRAM (if fitted)

When required, the Electronic Stability Program (ESP) improves driving stability in any driving situation, regardless of the road surface or tyre grip.

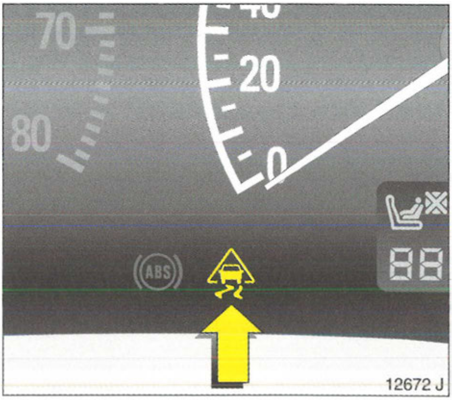
Note: *ESP operates in conjunction with the Traction Control (TC) system. Refer to Traction Control in this chapter.*

ESP monitors the vehicle movements. As soon as the vehicle starts to swerve (understeer / oversteer), engine output is reduced (the sound of the engine changes) and individual wheels are specifically braked. This helps improve the vehicle driving stability on snow and ice and on wet or slippery road surfaces. ESP helps you to keep control of the vehicle and reminds you to match your speed to the road conditions.

Note: *Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.*

The ⚠ light on the instrument panel illuminates for a few seconds when the ignition is switched on. If ⚠ does not illuminate or if it illuminates during driving, a fault is indicated in the system and ESP and / or TC may not be operational. Have your Holden Retailer check the system.

The ⚠ light in the instrument panel flashes when ESP or TC is operating, indicating that the vehicle is in a critical situation. When this occurs, engine output may be reduced and the vehicle may be braked automatically to a small degree.



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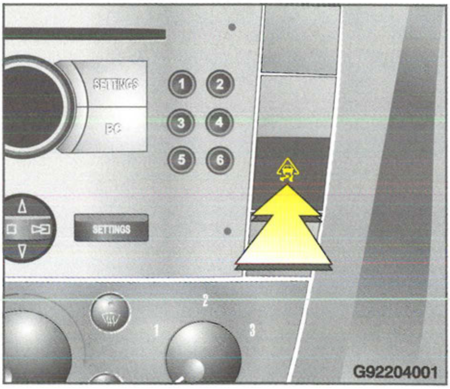
Switch off ESP and TC

ESP and TC are automatically switched on when the ignition is switched on. This system is operational when the ⚠ light in the instrument panel remains off.

To manually switch off ESP and TC, press the ⚠ button located to the right of the radio panel. The ⚠ light in the instrument panel illuminates.

Note: *ESP and TC can be switched off only when the vehicle speed is less than 60 km/h.*

Press the ⚠ button again to switch on ESP and TC.



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CHAPTER 5

Fuel

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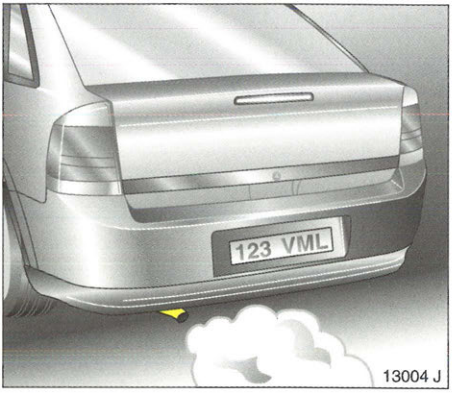
5-2 *Fuel*
5-4 *Petrol*
5-5 *Emission control*
5-6 *Reducing fuel consumption*

FUEL



EXHAUST WARNING – CARBON MONOXIDE POISONING

- **Exhaust gases can produce carbon monoxide; a dangerous gas, which can cause unconsciousness and even death to both humans and animals.**
- **You could inhale the gases if the exhaust system on your vehicle is faulty.**
- **To protect against exhaust gases entering the vehicle, the exhaust system and the body should be inspected:**
  - **each time the vehicle is serviced**
  - **whenever a change is noticed in the sound of the exhaust system**
  - **whenever the exhaust system, underbody or rear of the vehicle is damaged.**
- **Take the vehicle to your Holden Retailer if you think your vehicle needs inspecting.**
- **Do not sit (or leave children or pets) in a parked vehicle for any extended period of time with the engine running.**
- **Do not run the engine in an enclosed area (such as the garage) any longer than is needed to move the vehicle.**
- **Driving with the tailgate / boot open is not recommended. If you must travel with tailgate / boot open, close all of the windows, ensure that the heater controls are set to outside air (rather than recirculated) with air directed to the face and the fan on the highest speed. Do not exceed 50 km/h.**

When the vehicle is driven for the first time, wax and oil on the exhaust system may evaporate, producing smoke-like emissions which should not be inhaled. Allow the wax and oil to evaporate while the vehicle is in the open air.

FUEL cont.

LPG conversion

These vehicles have not been designed by Holden to be converted to LPG and Holden does not provide LPG conversion kits for these vehicles. Please refer to the warranty section in Chapter 9. Your New Vehicle Warranty may be invalidated to the extent that any LPG alterations affect the specifications of your vehicle.

WARNING – USE OF FUEL CONTAINING ETHANOL

When purchasing such fuel, we recommend that your vehicle be operated on fuel containing no more than 10% ethanol. Purchasing your fuel from a reputable fuel retailer may reduce the risk of purchasing fuel with more than 10% ethanol or fuel which contains abnormal fuel properties.

Under no circumstances should you use fuel containing more than 10% ethanol. Use of such fuels may result in engine malfunction, starting and operating difficulties, and materials degradation. These adverse effects could result in permanent damage to your vehicle and personal injury. It is also important to note that when ethanol blends are used, fuel consumption can be expected to increase due to the lower energy content of ethanol.

The use of fuel containing more than 10% ethanol may also affect your New Vehicle Warranty to the extent that Holden considers that the fuel affects the specifications and quality of your vehicle.

PETROL

WARNING:

- **Petrol should be regarded as extremely flammable and highly explosive.**
- **Always turn off the engine and any mobile phones when refuelling.**
- **Do not smoke or allow open flames or sparks near the vehicle when refuelling.**
- **If petrol fumes are smelt while driving, the cause should be found and corrected without delay by a Holden Retailer.**
- **The use of any fuel, other than the fuel specified, may cause serious damage to your vehicle and may void your New Vehicle Warranty. Only clean fuel of good quality should be used.**

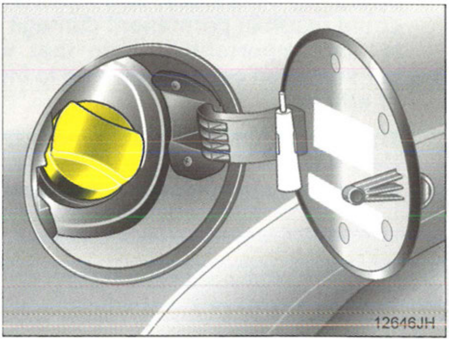
The petrol filler is located on the driver's side of the vehicle.

The fuel filler flap is unlocked when **all** *doors are unlocked and locked when the doors are locked.*

Remove the filler cap by turning it anticlockwise, and hook the cap onto the filler flap.

After refilling, securely tighten the cap clockwise and close the flap.

Refer to Chapter 8 for the capacity of the fuel tank.



Petrol requirements R.O.N. (Research Octane Number)

2.2 LITRE ENGINE

Use unleaded petrol of at least 91 RON.

3.2 LITRE ENGINE

Use unleaded petrol of at least 95 RON (premium, high octane). If premium unleaded petrol is not available, normal unleaded (91 RON) can be used provided that heavy engine loads are avoided, such as driving at high speed, towing in hilly areas or loading up the vehicle excessively.

Note: *Slight reduction in engine output and torque may occur if 91 RON petrol is used.*

Petrol overflow

Over filling of the petrol tank can affect the evaporative emission control system and can also result in a smell of petrol inside the vehicle. Do not add petrol after the petrol filler first clicks off (or petrol blows back) as this allows room for the petrol to expand inside the tank.

Immediately wipe off any overflowing petrol from the vehicle, close the fuel opening and spray or splash with water.

EMISSION CONTROL

Your vehicle is fitted with emission control systems designed to reduce the amount of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) that are emitted from the engine and fuel system into the atmosphere. When hydrocarbons and oxides of nitrogen are exposed to sunlight under certain conditions, they contribute to photochemical smog. In addition, carbon monoxide is toxic when highly concentrated.

Owner responsibility

Vehicles sold and serviced within Australia have been designed to comply with Australian Design Rules and State Regulation emission requirements.

The engine, engine control system or exhaust system of your vehicle must not be modified in any way. Any change to the manufacturer's design may increase the emissions or otherwise defeat the intent of the regulations.

WARNING:

Any person who removes, modifies or hinders any part of the emission control system fitted to a vehicle will be contravening Australian Design Rules, refer to A.D.R. 28/01 (External Noise for Motor Vehicles) and A.D.R. 79/01 (Emission Control for Light Vehicles). It is also illegal to drive a vehicle modified in this way.

Maintenance requirements

To ensure continuing compliance with the regulations you must maintain your vehicle's emission control system as per the service manual for your vehicle, at the frequency shown in the Holden Maintenance Schedule in Chapter 12.

It is recommended that necessary servicing is performed by an authorised Holden Retailer who has the specialised servicing equipment and trained personnel available to ensure that the adjustments and services specified are carried out.

Petrol filler nozzle restrictor

Your vehicle has been designed to operate on unleaded petrol.

A petrol nozzle restrictor is fitted to ensure that only unleaded petrol is used; this allows the thinner, unleaded petrol nozzle to enter the fuel filler neck and open the hinged flap (so that petrol can be added to the tank). The leaded petrol nozzle is wider and cannot fit into the filler neck to open the flap.

WARNING:

The use of any fuel, other than the fuel specified, may cause serious damage to your vehicle and may void your warranty. Only clean fuel of good quality should be used.

REDUCING FUEL CONSUMPTION

Engine

Maintain the engine in peak mechanical condition by having it serviced regularly in accordance with the Maintenance Schedule in Chapter 12. This ensures that items such as the spark plugs and the air cleaner are maintained for minimum fuel usage and peak engine performance.

Tyre pressure

Maintain the recommended tyre pressures. Inadequate tyre pressure costs money in two ways: higher fuel consumption and increased tyre wear. Refer to Chapter 7.

Wheel alignment

Maintain correct front wheel alignment. Incorrect alignment causes drag, which increases fuel consumption.

Warm ups and idling

Avoid long engine warm ups. They are unnecessary and waste fuel. An engine reaches its efficient operating temperature most effectively when driving.

Also avoid long engine idling. If you have to wait for more than a couple of minutes, it is worthwhile to switch off the engine and conserve fuel. Three minutes of idling corresponds to approximately 1 km of driving.

Accelerating, driving and braking

Accelerate gently, avoiding rapid starts. Sudden bursts of speed, full throttle acceleration and hard braking are certain fuel wasters. Drive the vehicle at steady speeds where possible (after run-in). It is desirable to reach top gear as soon as possible, but under no circumstances should you force the engine to labour in top gear.

Riding the brake

'Riding the brake' (resting your foot on the brake pedal when you do not intend to brake) can cause overheated brakes. This can wear out the brake pads faster, damage the brake system and waste fuel.

Air conditioning

Turn off the air conditioning when not required to reduce fuel consumption, except for system lubrication purposes. Refer to Chapter 1.

Roof racks

Roof racks can increase fuel consumption by 1 litre per 100 km or more due to increased air resistance. Therefore, they should be removed when not in use.

Loading

Unnecessary weight increases fuel consumption especially when accelerating. In city traffic, a load of 100 kg can increase fuel consumption by 0.5 litre per 100 km.

Notes

CHAPTER 6

Emergencies

Page

6-2 Accidents
  Being involved
  Being a witness
  Medical assistance
6-4 Flat tyre
6-8 Engine overheating
6-10 Flat battery
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6-20 Towing another vehicle
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Your new vehicle is covered for 3 years by 24 hour Roadside Assistance. Refer to Chapter 9.

ACCIDENTS

All motorists are advised to learn what to do at the scene of an accident, particularly where people are injured. Injured people can choke to death if their air passages are not cleared. They can bleed to death unless the bleeding is stopped. They may require mouth-to-mouth resuscitation or may have to be moved, even though badly injured. It is important that you understand how to avoid further damaging an injured neck or back or other broken limbs.

In all cases, ensure safety for the rescuers, victims and bystanders. The following notes may help.

Part 1. Accident – being involved

If you are involved in an accident you are advised to do as follows:

- *Stop immediately and remember to turn off the engine and apply the park brake.*
- *Remember that time is vital.*
- *Remain calm and alert. Think quickly and clearly.*
- *Give all possible assistance to all injured persons (see Part 3. Medical assistance).*
- *Send for police and ambulance if anyone has been injured. Give information as accurately as possible. Give the exact location, the number of injured people and a brief report on the overall situation.*
- *Warn all other traffic approaching the scene. Turn off ignition switches. Stop any smoking and mobile phone use near spilt petrol. In darkness, try and light up the area to warn others – use hazard lights, a torch and headlights. Do not use flammable items.*
- *Clear the road of accident debris.*
- *Exchange your name, address, vehicle registration number and the vehicle owner's name and address with the other parties involved in the accident.*
- *If damage to property only has occurred, report the facts to the owner of the damaged property, to his or her representative, to any police present at the scene or to the nearest Police Station.*
- *Try to note all important facts because such details may be important if needed later.*

Part 2. Accident – being a witness

If you witness a road accident or it becomes your task to stop and help at the scene of an accident:

- *Keep in mind that an observant witness can prove most helpful. Some day you yourself might be very glad of help from a witness.*
- *Do not stop at the scene of an accident just to be a spectator.*
- *Where other people are already in attendance and giving assistance, you should stop only if you can contribute assistance.*
- *Give what assistance you can to any injured persons. (See Part 3. Medical assistance).*

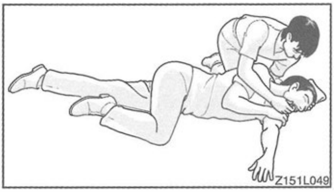
ACCIDENTS cont.

Part 3. Medical assistance

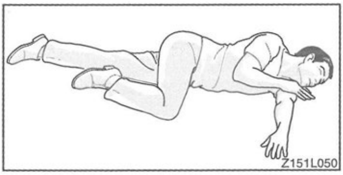
The basic first aid information is intended as a guide only and may not be applicable in all situations. Always defer to a trained medical officer or other person with first aid knowledge. Protective equipment, such as rubber gloves are recommended.

Keep calm and think clearly. Your experience may not be much but do your best.

- *Look after any unconscious people first. Check airway, breathing and circulation. If not breathing, then check if air passages are clear. That is, nose and mouth. Use your fingers to clear air passages if necessary. If the airway is clear then mouth-to-mouth resuscitation may be needed at once.*
- *You must be very careful when moving an injured person. It is best not to move at all, except if in danger, as serious and permanent damage can be done to an injured neck or back if not supported during movement. AVOID BENDING OR TWISTING A PERSON'S NECK OR BACK. KEEP THEM STRAIGHT. All injured limbs require special support when an injured person has to be moved.*
- *Unconscious people can choke.*
  To help avoid this:
  - *carefully turn the person to one side*
  - *tilt their head back slightly*
  - *wipe out the mouth with your finger to remove blood, vomit, broken teeth or dentures.*



- *Provided it is not dangerous to do so due to injuries, an unconscious person will do best in the following position:*
  - *Lie the person on one side.*
  - *Bend the uppermost knee until the thigh is at a right angle to the body.*
  - *Bend the uppermost shoulder and elbow so that the hand lies near the face.*
  - *Gently pull the underneath arm so that it rests straight on the ground free of any body weight.*



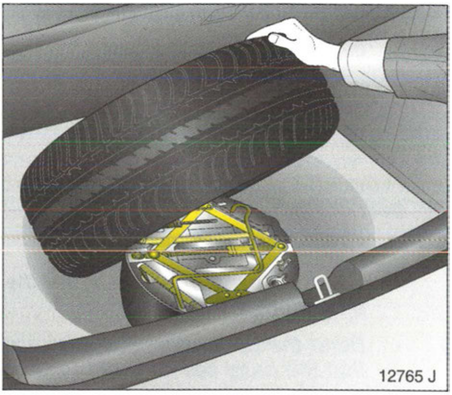
- *Try to stop bleeding by applying direct pressure, using your hand, or by pressing torn flesh together. Use any clean cloth available. Fold cloths to make pads. If necessary press one pad on top of another. Keep pressure around edges of a wound but never use a tourniquet.*
- *Shock may be treated by reassurance, relieving pain, controlling any bleeding and keeping the injured person warm but not hot. It is best not to give any fluids and never alcohol.*
- *If the injured person is in danger and has to be moved, try and have three or four people help and concentrate on not bending or twisting the neck, spine and injured limbs. Keeping the neck and spine straight is most important.*

FLAT TYRE

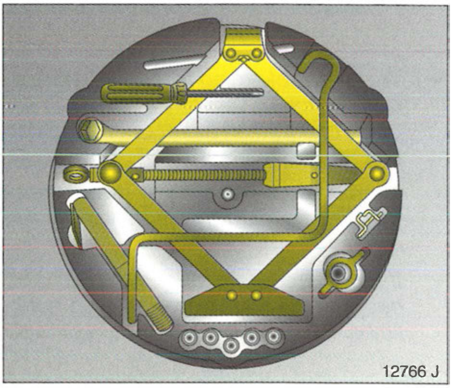
WARNING:

- **Use the jack only for lifting the vehicle when changing wheels.**
- **Never get beneath the vehicle when it is supported only by the jack.**
- **Do not start or run the engine while the vehicle is supported only by the jack.**
- **All passengers should be out of the vehicle when it is being jacked.**
- **Use the jack only at the designated lifting points. Use in other locations could damage the vehicle.**
- **The vehicle should only be jacked on hard, level surfaces.**

1. *Park on a level surface (ensuring that the wheels are pointing straight ahead) and firmly set the park brake.*
2. *Remove the ignition key and for manual transmission, select reverse or first gear, or for automatic transmission, select* **P** *(park).*
3. *Lift up the floor cover and remove the spare wheel.*

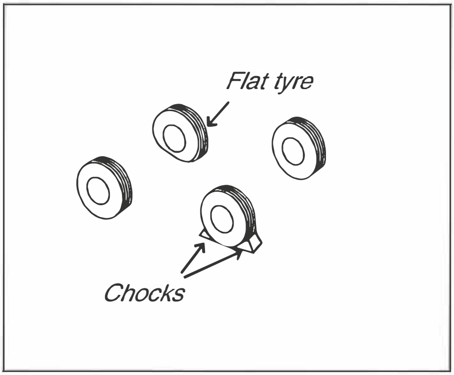


4. *The jack, and tools are stowed beneath the spare wheel. Remove the jack, and tools.*

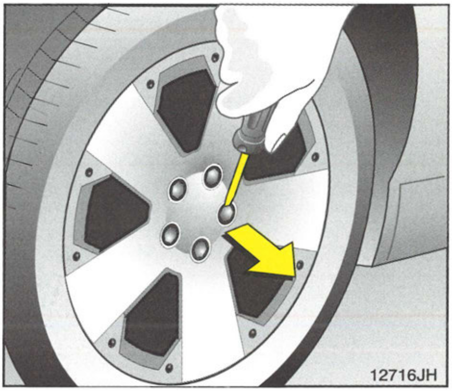


FLAT TYRE cont.

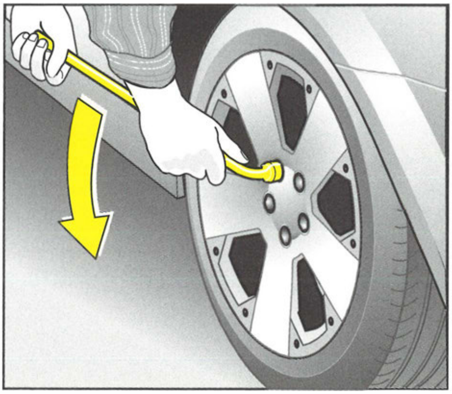
5. *Chock the wheel that is diagonally opposite to the flat tyre, by placing wedge blocks, any available blocks of wood or rocks behind and in front of it.*



6. *Use a screwdriver to lever the wheel bolt caps off.*

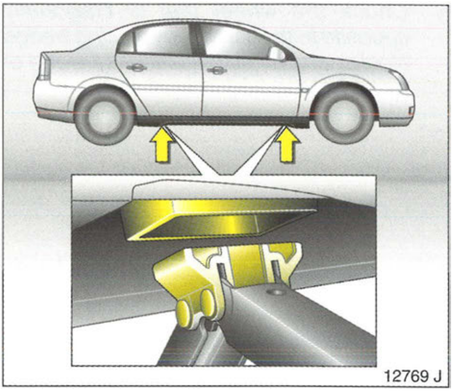


7. *With the wheel bolt wrench, loosen but do not remove, the wheel bolts (turning them anticlockwise).*



FLAT TYRE cont.

8. *Plastic recesses at the front and rear of the vehicle underbody indicate the points to place the jack.*



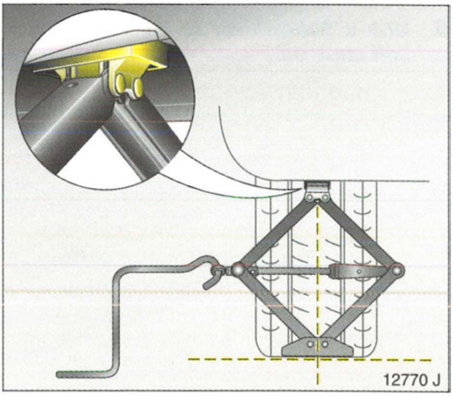
WARNING:

Failure to position the jack as described above could result in serious personal injury or vehicle damage caused by the vehicle slipping off the jack.

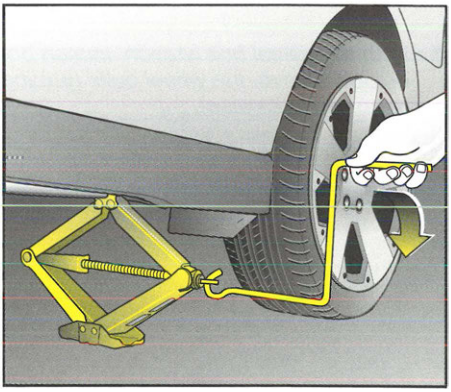
9. *Position the jack in the recess nearest to the flat tyre.*

   Ensure that:

   - *the plastic recess surrounds the jack claw*
   - *the jack base is touching the ground directly below the claw of the jack.*

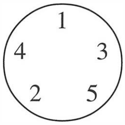


10. *Attach the crank to the eye of the threaded rod and turn the crank handle clockwise to raise the vehicle. Continue until the tyre is clear of the ground.*

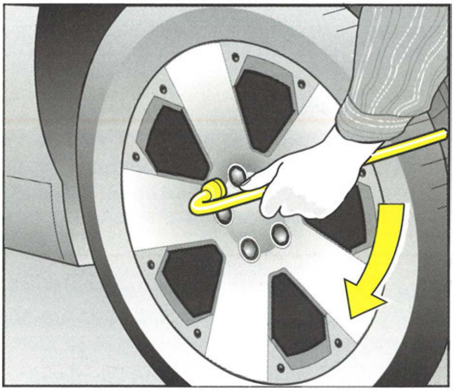


FLAT TYRE cont.

11. *Remove the wheel bolts and place them together in a clean, dry spot. Avoid getting dirt in the threads.*
12. *Remove the wheel from the vehicle. Clean any dirt and grit from the wheel hub face and fit the spare wheel.*
13. *Install the wheel bolts and tighten them by hand (in a clockwise direction). Then lightly tighten the wheel bolts in a crisscross sequence, with the wheel wrench.*
14. *Lower the vehicle completely and remove the jack.*
15. *Fully tighten the wheel bolts with the wheel wrench in a crisscross sequence, as shown.*
16. *Stow away the tools, jack and wheel.*
17. *Have the flat tyre repaired as soon as possible.*



Crisscross Sequence



WARNING:

- **As soon as possible after changing a wheel, have the wheel bolts tightened with a torque wrench to 110 – 140 Nm and have the new wheel balanced on the vehicle.**
- **Wheel bolts should be tightened evenly, to the correct torque, in a crisscross pattern. Wheel bolts which have not been tightened properly could eventually allow the wheel to come off while the vehicle is moving!**

ENGINE OVERHEATING

WARNING:

Immediate action is required if the engine overheats. For physical reasons, the engine temperature gauge shows the correct temperature only if there is sufficient coolant in the cooling system. Should irregularities in the coolant temperature occur, for example if the gauge enters the red zone, check the coolant level immediately. Overheating can also be indicated by steam escaping from under the bonnet, a loss of power or a loud knocking or pinging noise.

Continued driving EVEN FOR A SHORT TIME could cause a fire, personal injury or vehicle damage.

Pull out of the traffic as soon as possible and stop the vehicle. Leave the engine idling and the park brake applied while you get out and check that the cooling fan is working.

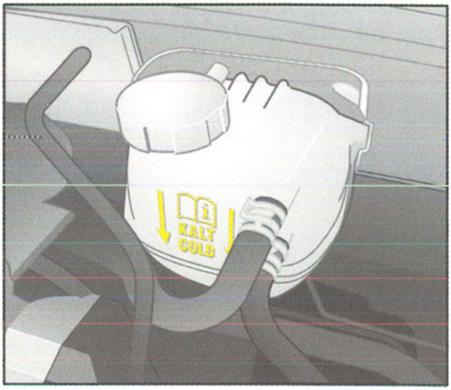
WARNING:

Do not open the bonnet if you can see or hear steam or coolant escaping from the engine compartment. Scalding fluid and steam can be blown out under pressure and cause serious burns. Wait until no steam or coolant can be seen or heard escaping before opening the bonnet.

If the fan is working and the temperature gauge needle has not returned to its normal position within a few minutes, stop the engine, remove the ignition key and proceed as follows:

1. *Look for leaks in or around the radiator hoses and connections, the heater hoses and connections, the radiator and the water pump.*
2. *Take care when checking all of these areas as they will probably still be hot.*
3. *If you find a major leak or other problems that may have caused the engine to overheat, do not run the engine until these problems have been corrected.*
4. *If you do not find anything wrong, check the engine coolant level in the surge tank.*

   When the engine is hot the level should be above the KALT / COLD mark.
5. *If the level is below the KALT / COLD mark, fluid should be added.*



WARNING:

Do not remove the cooling system cap if the engine and radiator are still hot.

ENGINE OVERHEATING cont.

6. *When the engine has cooled sufficiently, remove the surge tank cap:*
    - *Cover the surge tank cap with a thick cloth.*
    - *Slowly turn the cap anticlockwise, gradually releasing any residual pressure.*
    - *Remove the cap.*
7. *With the engine idling, fill the surge tank with clean water to the KALT / COLD mark.*
8. *Replace the cap and leave the engine idling for a few minutes.*

If the temperature gauge no longer signals an overheat condition, you can resume driving at a reduced speed. Return to normal driving if the temperature gauge does not show an overheat condition again after 10 minutes.

If overheating occurs again, have the vehicle attended to by a qualified mechanic as soon as possible.

Note: *With this type of sealed and pressurised cooling system, there should be very little loss of coolant. If the coolant level in the surge tank is low, a leak is indicated. Have your Holden Retailer locate and repair the leak.*

The engine may temporarily operate at high temperatures during more demanding operating conditions, especially on very hot days. These conditions include:

- *climbing a long hill*
- *immediately after high speed driving*
- *idling for long periods in traffic*
- *towing a heavily laden trailer or caravan.*

Avoid operating your vehicle for prolonged periods in any of the above circumstances if the temperature gauge indicates high engine coolant temperature.

Refer to Chapter 7 for maintenance instructions to help protect your cooling system from overheating.

FLAT BATTERY

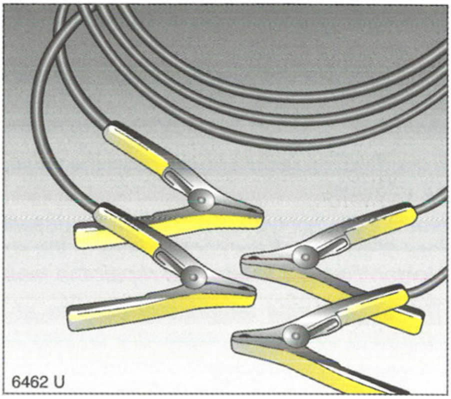
WARNING:

DO NOT attempt to push start or tow start this vehicle, as it is fitted with a catalytic converter. If uncombusted fuel reaches the catalytic converter and ignites, the converter could overheat or be destroyed by backfire.

If your vehicle will not start due to a flat battery, it may start using the energy from a battery in another vehicle; a procedure called jump starting.

Read the following procedure in full before attempting to jump start your vehicle.

If after reading the following procedure you are still unsure about jump starting, we strongly recommend (for your safety and that of your vehicle) that you leave the starting to a competent mechanic.



WARNING:

Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, to lessen the chance of personal injury when working near a battery:

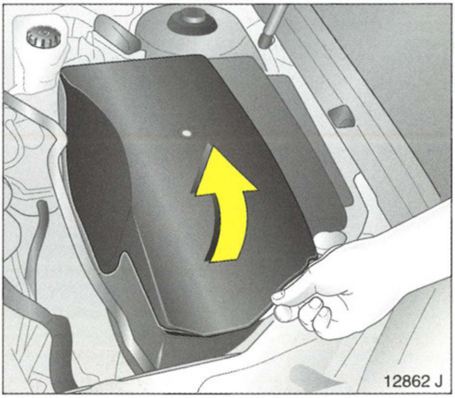
- **Do not expose the battery to open flames or sparks. Battery action generates hydrogen gas which is flammable and explosive.**
- **Do not smoke near a battery.**
- **Wear eye protection such as industrial safety glasses and avoid leaning over the battery whenever possible.**
- **Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately. In case of eye contact you should get medical help. Battery acid also damages paint and fabrics. To minimise damage, wash off immediately.**
- **Be sure any batteries that have filler caps are properly filled with fluid.**
- **Remove rings, metal watch bands and other metal jewellery before working around the battery.**
- **Carefully follow each step in the jump starting procedures.**
- **Never use a quick charger to start your engine.**
- **Do not lean over the battery during jump starting.**

FLAT BATTERY cont.

Jump starting precautions

- *The battery of your vehicle has a negative earth and a 12 volt rating. The battery in the assisting vehicle must be the same voltage and polarity (negative earth).*
- *The capacity of the charged battery must not be substantially lower than that of the discharged battery. Check the specifications of both batteries to ensure that they comply. Serious injury or damage may result if the wrong type of battery is used.*
- *Position the two vehicles so that they are not touching, apply the park brakes and for vehicles with an automatic transmission, select* **P** *(park), or manual transmission, select* **N** *(neutral).*
- *Turn off the ignition and all lights and accessories in both vehicles, except for the those needed for the work area (such as hazard lights).*
- *Access the flat battery by pulling the battery case cover forwards and upwards, as illustrated.*
- *Access the assisting vehicle battery.*

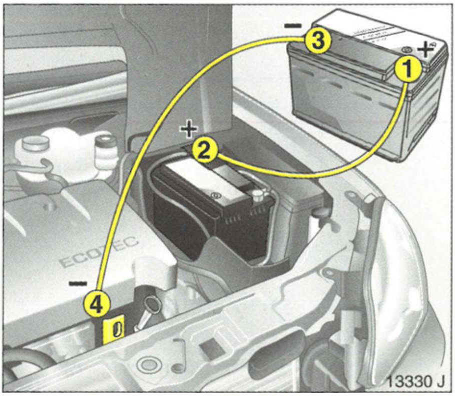
Note: *Always use spike protection jumper leads to avoid damage to electrical components.*



Jump starting connections

When making all connections, take care that the clamps from one cable do not inadvertently touch the clamps on the other cable.

Also, ensure that jumper cables are not on or near pulleys, fans or other points that will move when the engine is started.



1. *Attach one end of the first jumper cable to the positive terminal of the assisting battery (***+** *or* **P** *on the battery case or battery post).*
2. *Connect the other end of the same cable to the positive terminal of the flat battery.*
3. *Attach one end of the second jumper cable to the negative terminal of the assisting battery (***–** *or* **N** *on the battery case or battery post).*
4. *Connect the other end of the second cable to a solid, stationary, metallic point on the engine with the flat battery (such as the engine block). DO NOT connect directly to the negative post of the flat battery. The connection should be as far away from the flat battery as possible.*

FLAT BATTERY cont.

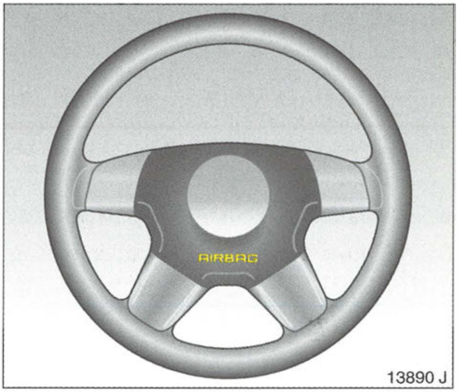
5. *Start the engine in the assisting vehicle and run the engine at a moderate speed.*
6. *Start the engine in the vehicle with the flat battery.*

   Note: *Attempts to start the engine with the flat battery should be made at intervals of 1 minute and should not last longer than 15 seconds.*
7. *After starting, allow both engines to idle for approximately 3 minutes with the cables connected.*
8. *Leave the engines running as you remove the jumper cables.*
9. *Remove the cables in the reverse order of the connecting procedure. While removing each cable clamp, take care that it does not touch any moving parts or any other metal, especially while the other end remains attached.*

AIRBAGS

The airbag system is identified by the word AIRBAG at the airbag locations:

- *On the steering wheel.*
- *Glovebox.*
- *Door-side of the front seats.*
- *On the pillars (curtain airbags, if fitted).*


AIRBAG
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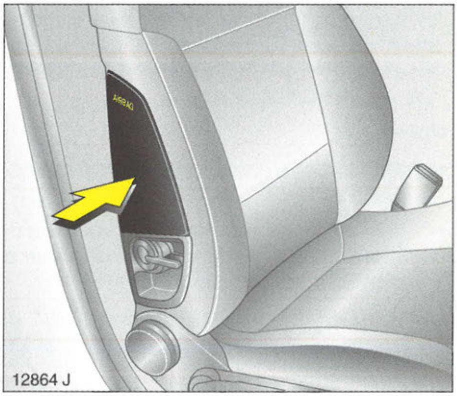
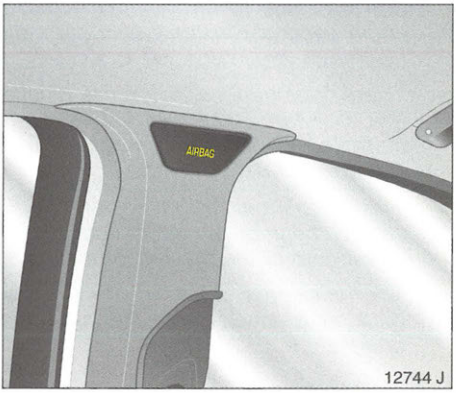

AIRBAG
12864 J


AIRBAG
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AIRBAGS cont.

Operation

If your vehicle is involved in a severe collision, the airbags with in the relevant impact zone will inflate, assisting the seat belts to restrain body movement. (Refer to Impact information, following.)

When triggered, the airbags inflate in milliseconds and form a safety cushion for the driver and front passenger. Forward movement and / or movement in the respective door areas is cushioned substantially reducing the risk of injury.

Impairment of view will not occur as the airbags quickly deflate; the whole process taking only a moment.

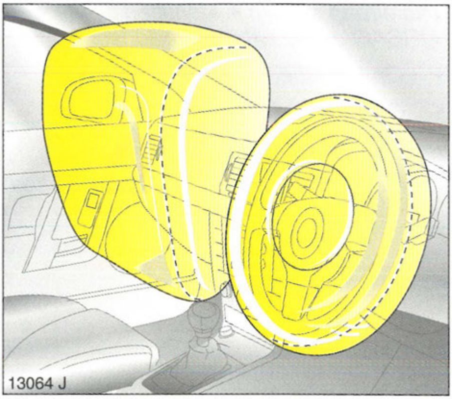
An operating noise may be heard and a small amount of smoke-like gas will be released. The gas is harmless and does not indicate malfunction or fire.

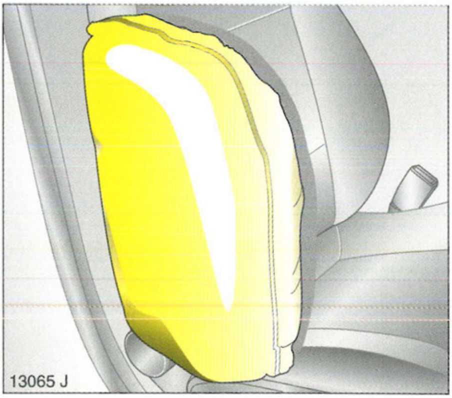
Note:

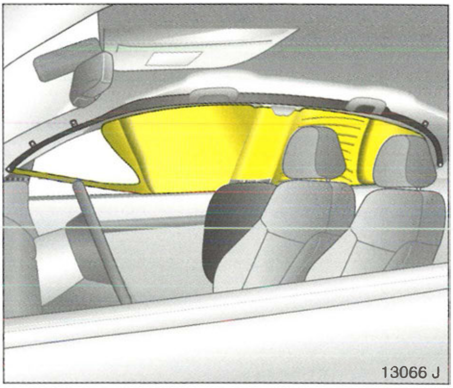
- *The airbags assist, but do not replace the seat belts.*
- *The front airbags are not designed to inflate if the vehicle is hit from the rear or side or if the vehicle overturns.*
- *Seat belts should be worn by all occupants (by law) whenever the vehicle is moving.*
- *Airbags inflate with great force. If you are too close to an inflating airbag it could seriously injure you. Seat belts help keep you in position in a crash.*
- *The airbags inflate with extreme rapidity. It is, therefore, important that seats are correctly adjusted. Adjust the seat to suit the occupant's height.*

  The driver should be sitting upright with slightly bent arms when holding the upper area of the steering wheel.

  The passenger seat should be as far back as possible, with the back rest upright.





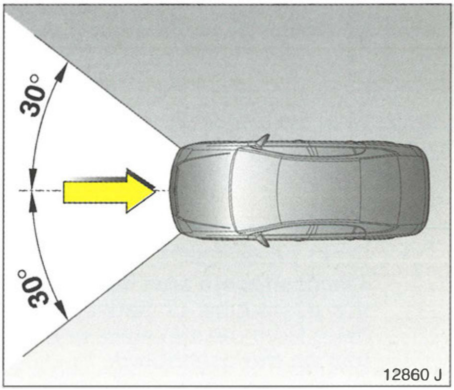


AIRBAGS cont.

Independent operation

The front airbags and the side and curtain airbags are triggered independently of each other.

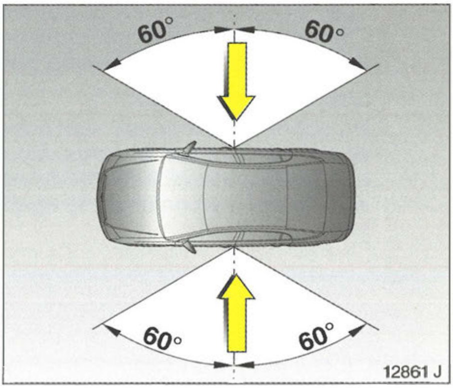
The driver and passenger front airbags operate as a pair (they are triggered simultaneously) and the side and curtain airbags operate as a pair (triggered simultaneously).



Impact – front airbags

The front airbags will inflate if the vehicle experiences a severe impact within the non-shaded section illustrated.

The front airbags will not inflate if the vehicle is struck from the side, rear or in some rollovers. Always wear a seat belt.



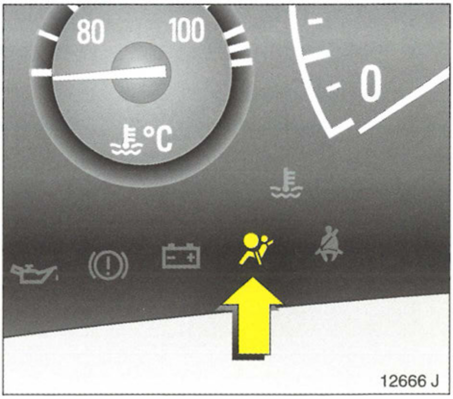
Impact – side and curtain airbags

The side and curtain airbags (on the side of impact) will inflate if the vehicle experiences a severe impact within the non-shaded section illustrated.

The side and curtain airbags will not inflate if the vehicle is struck outside the range shown in the illustration. Always wear a seat belt.

After use, the whole airbag system must be replaced, preferably by a Holden Retailer.

The system should also be inspected by a Holden Retailer if the steering wheel or dashboard area is scratched, cracked or damaged. Keep the horn pad area clear, as failure to do this may hinder airbag operation.



Warning light

The light in the instrument panel illuminates for a few seconds when the ignition is switched on.

If the light does not go out or if it illuminates when driving, a defect in the system is indicated. The airbag system may not function correctly, especially in an accident. Consult a Holden Retailer as soon as possible.

AIRBAGS cont.

The electronics controlling the airbag system and belt pretensioners are located in the centre console. To prevent malfunctions, do not place magnetic objects in the immediate vicinity of the console.

Extensive design and testing has gone into the airbag system. It should however, be treated with respect. Any careless or unskilled interference with the system could lead to its failure or to accidental deployment.

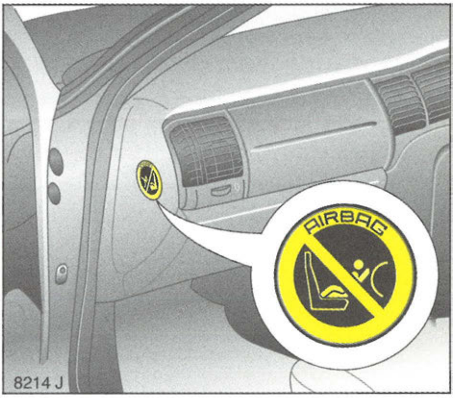
Any work to the electrical system, steering column, dashboard area, steering wheel or airbag system should be carried out by an authorised Holden Retailer.

WARNING:

- **Front passenger's airbag:**
  The dashboard area must be kept clear. Do not place any objects over the dashboard or between an airbag and yourself. Nothing should hang from the sun visor or mirror and a passenger must not rest their feet on the dashboard.
- **Driver's airbag:**
  The horn pad must not be covered with adhesive or any other material. The driver should adjust the seat as far back as possible and sit back as far as possible while still maintaining control of the vehicle.
- **Side impact airbags:**
  Do not fit unauthorised seat covers as they may impair the deployment of the side impact airbags. Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door. Always sit centrally in the seat.

AIRBAGS cont.

Airbag and child restraints



WARNING – EXTREME HAZARD:

- **Do not use a rearward facing child restraint on a seat protected by an airbag in front of it. The child could be seriously injured if the airbag inflates, as the child's head would be very close to the inflating airbag.**
- **Never install a child restraint in the front seat of a vehicle fitted with side impact airbags. Remember that it is safest for children to be seated in the rear seats.**

Refer to Chapter 3 for further information about fitting a child restraint.

Do not touch any airbag system internal components or wires. The wires can be identified by yellow taping or yellow tubing and the connectors are also yellow.

Scrapping a vehicle that has an uninflated airbag or airbags can be hazardous. Ask your Holden Retailer for assistance.

Bull bar fitment

Fitting a bull bar or making other modifications to the front of the vehicle can affect airbag deployment. These may change the impact speed which would normally cause the airbags to inflate, reducing their effectiveness.

Bull bars should not be fitted to vehicles operating in suburban areas as they increase the risk of injury to a pedestrian in the event of a collision. Bull bars are recommended only for country / outback areas where additional protection from straying animals is required.

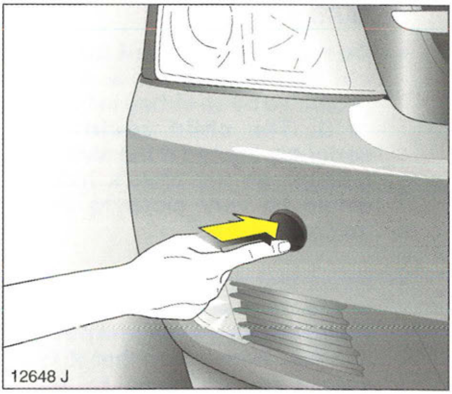
Defensive driving and limiting driving speed to the conditions is the best approach, particularly where roadside signs indicate wildlife is abundant.

TOWING YOUR VEHICLE

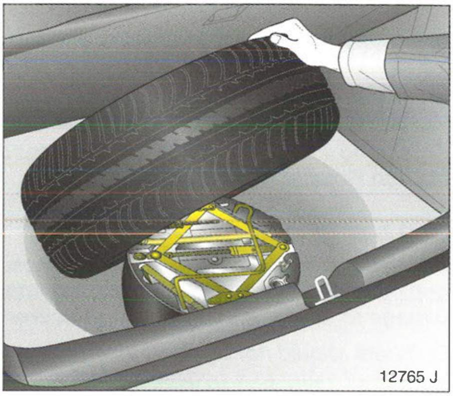
Proper lifting or towing equipment is necessary to prevent damage during any towing operation of the vehicle. State and local laws must be followed. In an emergency, your vehicle may be towed on all four wheels, as follows:

1. *Open the cover concealing the hole for the towing eye located at the front, driver's side of the vehicle.*

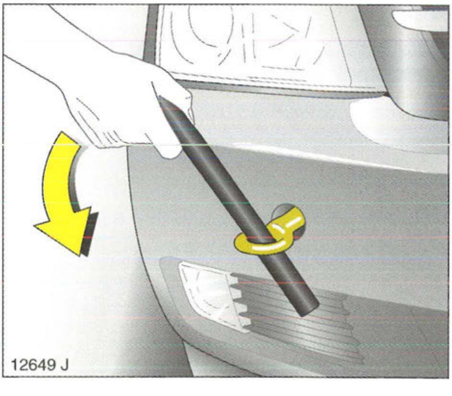
   To open the cover, press the bottom edge and pull the cover out.



2. *Locate the towing eye in the luggage compartment with the jack and vehicle tools under the spare wheel.*



3. *Screw the towing eye in anticlockwise as far as it will go. Use the wheel bolt wrench to tighten the eye until it is horizontal.*



TOWING YOUR VEHICLE cont.

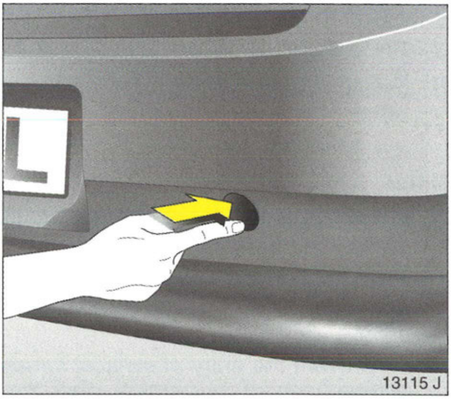
4. *Attach a tow rope or tow rod to the eye. Do not attach it to the bumper bars or brackets.*
5. *Place the transmission in neutral and release the park brake.*
6. *Switch on the ignition to free the steering lock and to allow operation of the windscreen wipers, horn and turn signals.*

Note:

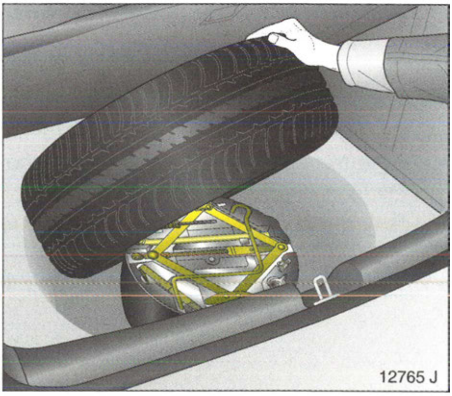
- *For safety and to prevent damage to the vehicles, avoid jerky movements and drive slowly during towing operations.*
- *Remember that power assisted brakes and power steering will not be available when the engine is off. Therefore, significantly more effort will be required to brake and steer.*
- *To prevent the entry of exhaust fumes from the towing vehicle into the passenger compartment of your vehicle, close the windows and move the ventilation controls to the recirculate position.*
- *Vehicles fitted with automatic transmission:*
  - *should only be towed facing forwards*
  - *must not be towed for further than 100 km*
  - *must not be towed faster than 80 km/h.*
- *If the transmission is defective or if the above speed or distance is to be exceeded, the front wheels must be raised.*
- *Only the driver should be in a towed vehicle.*

TOWING ANOTHER VEHICLE

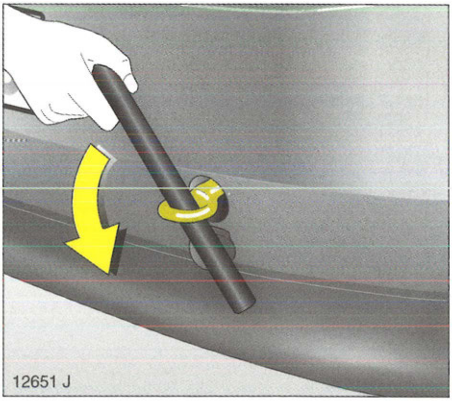
1. *Open the cover concealing the hole for the towing eye, located at the rear, driver's side of the vehicle.*



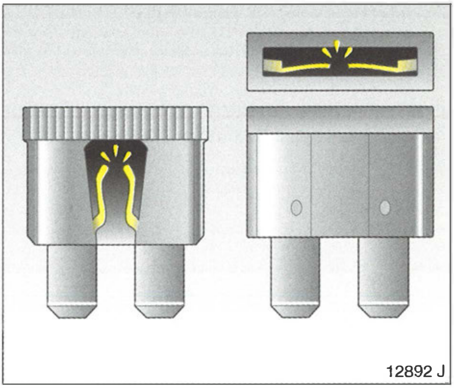
2. *The towing eye is located in the luggage compartment with the jack and vehicle tools, under the spare wheel.*



3. *Screw the towing eye in anticlockwise as far as it will go. Use the wheel bolt wrench to tighten the eye until it is horizontal.*
4. *Attach a tow rope or tow rod to the rear towing eye, never to the rear axle. Drive off slowly avoiding jerky movements.*



FUSES



Blade type fuses are used in this vehicle. The amperage value (A) is moulded into the body of each fuse.

Fuse replacement

Before removing a suspect fuse, turn off the ignition and any related switches. Examine the element in the fuse. A defective fuse can be recognised by its melted element.

If the element has melted, locate and repair the cause of the circuit overload then replace the fuse with one of the same rating.

FUSE COLOUR	*RATING*
Violet	*3 A*
Pink	*4 A*
Beige	*5 A*
Brown	*7.5 A*
Red	*10 A*
Blue	*15 A*
Yellow	*20 A*
White	*25 A*
Green	*30 A*
Orange	*40 A*

Consult your Holden Retailer if assistance is required.

WARNING:

When replacing a fuse, be sure to use a fuse of the specified amperage. Never install a wire or similar device to replace a fuse as this could damage electrical components and may cause a fire hazard to your vehicle.

Fuse locations

There are three fuse boxes in this vehicle, outlined in the following pages:

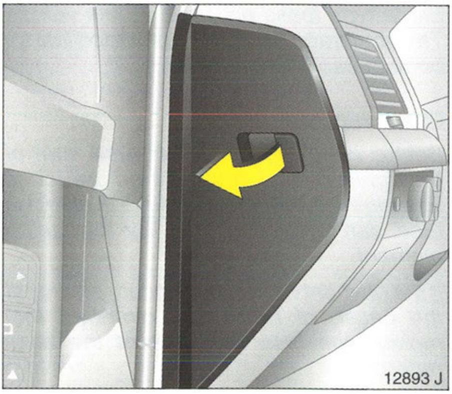
- *Passenger side fuse box – left-hand end of the dashboard (facing the door).*
- *Luggage area fuse box – left-hand storage compartment.*
- *Engine bay fuse box – front, left-hand side of the engine bay.*

FUSES cont.

Passenger side fuse box

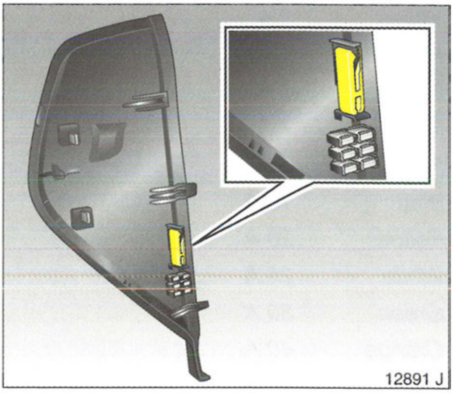
To remove the cover, pull firmly on the handle and lift out.

It is advisable to carry a full set of spare fuses. These are available from your Holden Retailer.

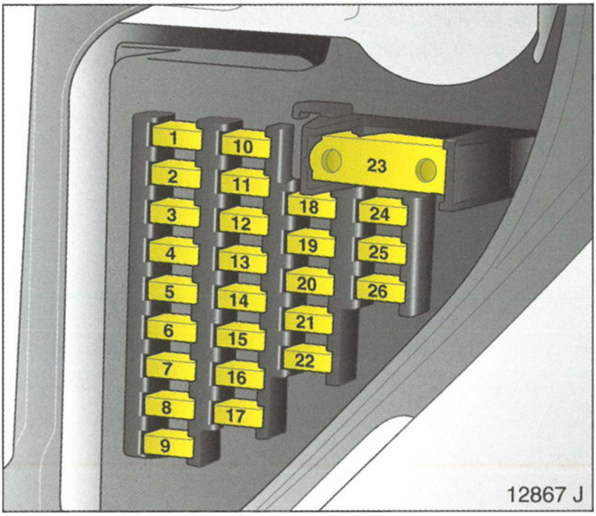


A fuse gripping tool is supplied in the fuse box cover to aid in fuse removal.

Spare fuses can be stored in this fuse box cover.



FUSES cont.



The following list includes fuses and the most important circuits that they protect. Some circuits may be protected by several fuses.

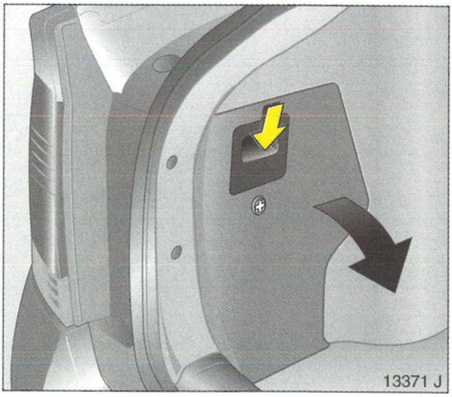
1	*Radio*	*20 A*
2	*Interior fan, heating, air conditioning*	*7.5 A*
3	*Sun roof*	*20 A*
4	*–*	*–*
5	*Door module control unit*	*7.5 A*
6	*Brake light*	*7.5 A*
7	*Bodywork module control unit*	*30 A*
8	*Control unit Front passenger door module*	*30 A*
9	*Central control unit*	*7.5 A*
10	*Control unit Steering column module*	*7.5 A*
11	*Diagnostics plug*	*5 A*
12	*Battery overload protection*	*15 A*
13	*–*	*–*
14	*–*	*–*
15	*Control unit Driver's door module*	*30 A*
16	*–*	*–*
17	*Instruments, information display*	*15 A*
18	*Air conditioning system*	*7.5 A*
19	*–*	*–*
20	*Yaw sensor (ESP, if fitted)*	*7.5 A*
21	*–*	*–*
22	*Cigarette lighter*	*30 A*
23	*Interior fan, air conditioning system, climate control*	*40 A*
24	*–*	*–*
25	*Heating, air conditioning*	*7.5 A*
26	*Instruments, information display*	*7.5 A*

FUSES cont.

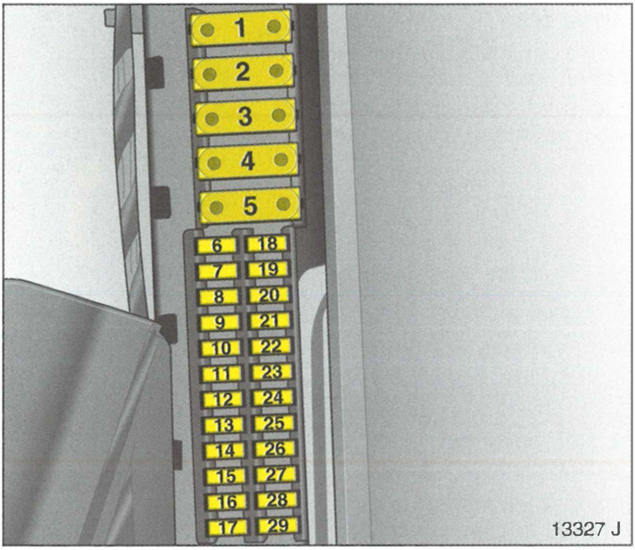
Luggage area fuse box

To remove the cover, push the bar down and open the cover.

It is advisable to carry a full set of spare fuses. These are available from your Holden Retailer.



FUSES cont.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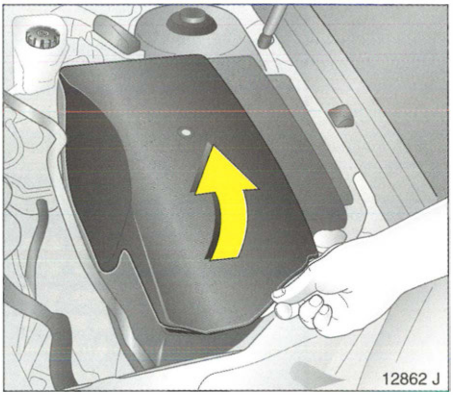
The following list includes fuses and the most important circuits that they protect. Some circuits may be protected by several fuses.

1	*–*	*–*
2	*–*	*–*
3	*–*	*–*
4	*Rear demister*	*40 A*
5	*–*	*–*
6	*Electric windows*	*30 A*
7	*Electric windows*	*30 A*
8	*–*	*–*
9	*Horn*	*15 A*
10	*Fuel pump*	*20 A*
11	*Battery voltage, terminal 30*	*25 A*
12	*–*	*–*
13	*Towing equipment*	*20 A*
14	*Rear window wiper*	*15 A*
15	*–*	*–*
16	*–*	*–*
17	*–*	*–*
18	*–*	*–*
19	*Tank flap*	*7.5 A*
20	*–*	*–*
21	*–*	*–*
22	*–*	*–*
23	*–*	*–*
24	*Battery voltage, terminal 30*	*25 A*
25	*–*	*–*
26	*–*	*–*
27	*Air conditioning*	*5 A*
28	*–*	*–*
29	*–*	*–*

FUSES cont.

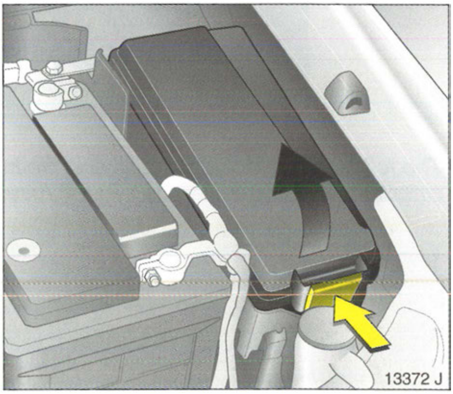
Engine bay fuse box

To remove the fuse box cover, first remove the battery cover; pull it forward and upwards.

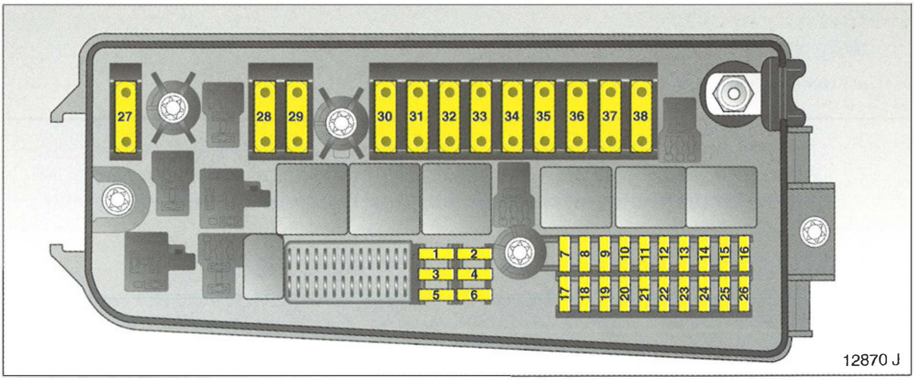


To remove the fuse box cover, push the latch and lift as illustrated.

Fuse lights are shown on the inside of the cover. It is advisable to carry a full set of spare fuses. These are available from your Holden Retailer.



FUSES cont.



The following list includes fuses and the most important circuits that they protect. Some circuits may be protected by several fuses.

1	*Engine electronics, transmission electronics*	*20 A*
2	*Starter motor*	*25 A*
3	*Horn*	*20 A*
4	*Air conditioning, climate control*	*10 A*
5	*Windscreen washer system*	*15 A*
6	*–*	*–*
7	*Central control unit, traction control, Electronic Stability Program*	*15 A*
8	*Headlights*	*10 A*
9	*–*	*–*
10	*–*	*–*
11	*Windscreen wiper*	*30 A*
12	*Windscreen wiper*	*30 A*
13	*Central control unit, traction control, ESP (if fitted)*	*7.5 A*
14	*–*	*–*
15	*Exhaust gas sensors*	*10 A*
16	*ABS*	*7.5 A*
17	*–*	*–*
18	*–*	*–*
19	*Headlight range adjustment*	*5 A*
20	*–*	*–*
21	*–*	*–*
22	*–*	*–*
23	*Auxiliary heating*	*20 A*
24	*Battery voltage, terminal 30*	*30 A*
25	*Battery voltage, terminal 30*	*30 A*
26	*–*	*–*
27	*–*	*–*
28	*Tailgate module control unit*	*60 A*
29	*ABS*	*40 A*
30	*Tailgate module control unit*	*60 A*
31	*Vehicle interior module control unit*	*60 A*
32	*ABS*	*40 A*
33	*Vehicle interior module control unit*	*60 A*
34	*Tailgate module control unit*	*60 A*
35	*Cooling fan*	*20 A*
36	*Cooling fan*	*30 A*
37	*–*	*–*
38	*–*	*–*

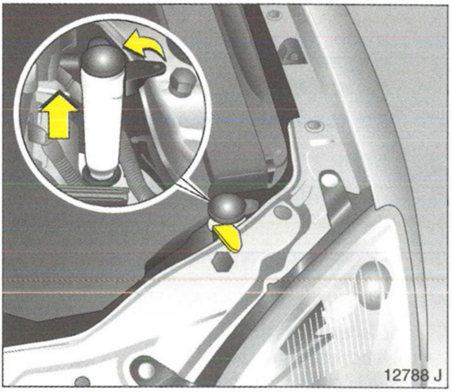
BULB REPLACEMENT

WARNING:

- **Always turn off the related switch.**
- **Do not touch new bulbs or reflectors with bare hands. Greasy fingers cause stains which evaporate, eventually resulting in a dull reflector. Grease spots on halogen bulbs will, within a short time, lead to bulb failure. Inadvertently stained bulbs may be cleaned with methylated spirits.**
- **It is important to fit only bulbs of the specified wattage.**
- **Detailed procedures for headlight aiming are provided in the relevant service manual for your vehicle. However, because headlight aiming is a safety item, it is recommended that you have it carried out by your Holden Retailer.**

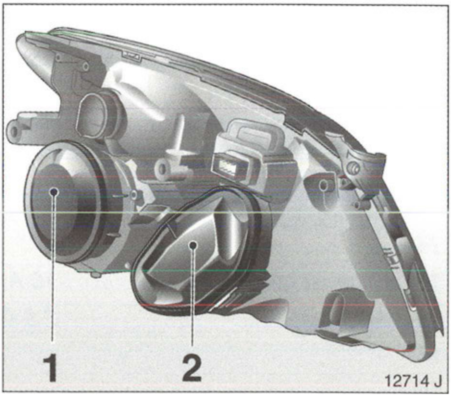
Note: *If you are replacing a bulb on the left-hand side of the vehicle, remove the washer bottle filler neck for easier access.*

To remove the filler neck, disengage the retaining clamp and pull the filler neck upwards. Washer fluid may escape if the bottle is full.



Headlights

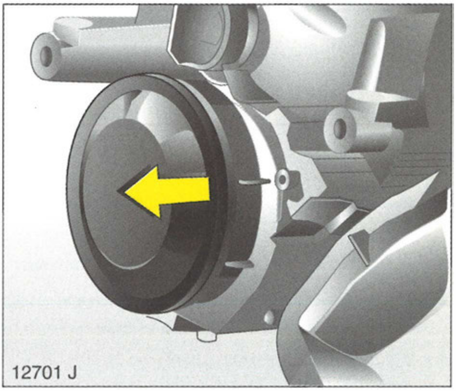
Separate bulbs are used for low beam and high beam. The outer bulb **1** *is for low beam and the inner bulb* **2** *is for high beam.*



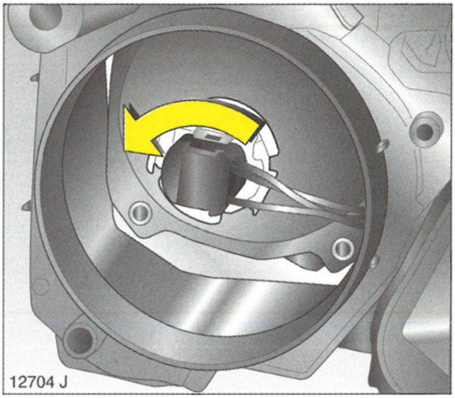
BULB REPLACEMENT cont.

LOW BEAM

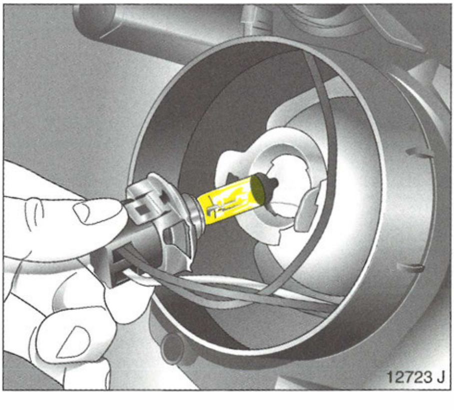
1. *Open the bonnet.*
2. *Remove the headlight protective cover.*



3. *Rotate the bulb holder anticlockwise to disengage it.*

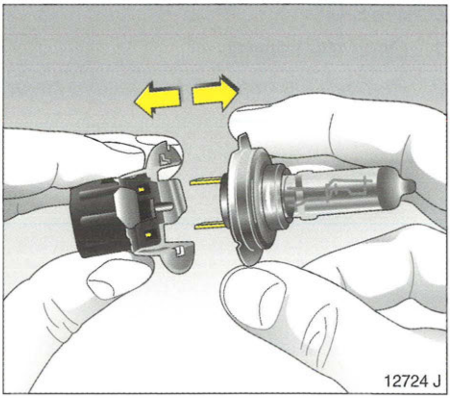


4. *Remove the bulb holder with the bulb from the reflector housing.*



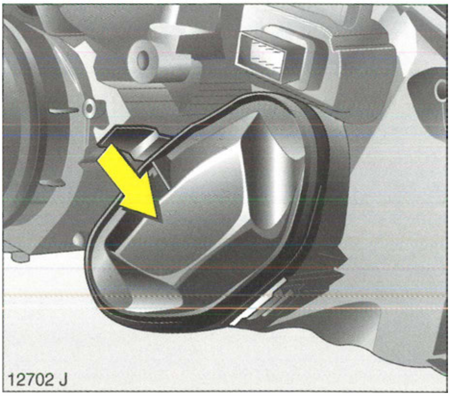
BULB REPLACEMENT cont.

5. *Detach the bulb from the bulb holder.*
6. *Without touching the glass, insert the new bulb into the bulb holder.*
7. *Install the bulb and bulb holder so that the lugs on the bulb holder engage in the reflector recesses.*
8. *Rotate the bulb holder clockwise to fully engage the bulb holder.*
9. *Install the headlight protective cover.*
10. *If the washer bottle filler neck was removed, install the filler neck.*
11. *Check the light operation.*

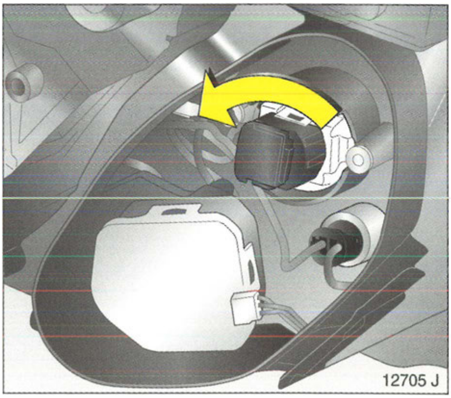


HIGH BEAM

1. *Open the bonnet.*
2. *Remove the headlight protective cover.*

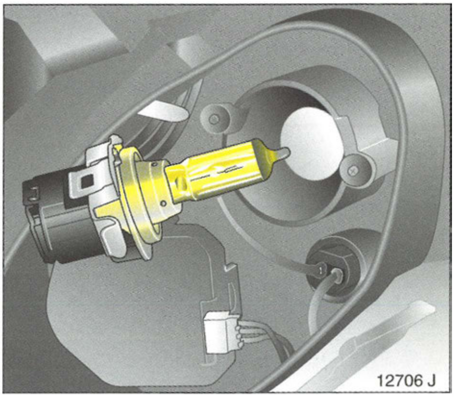


3. *Rotate the bulb holder anticlockwise to disengage it.*

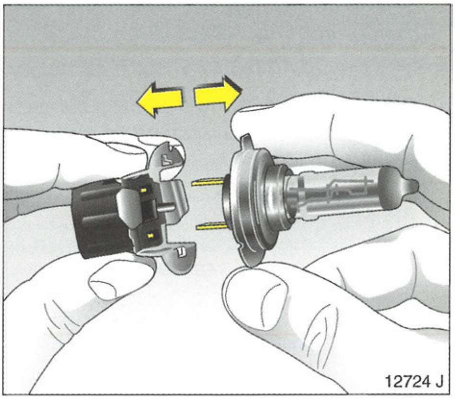


BULB REPLACEMENT cont.

4. *Remove the bulb holder and the bulb from the reflector housing.*



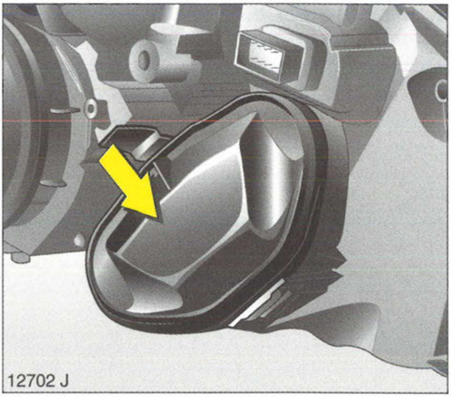
5. *Detach the bulb from the bulb holder.*
6. *Without touching the glass, insert the new bulb into the bulb holder.*
7. *Install the bulb and bulb holder so that the lugs on the bulb holder engage in the reflector recesses.*
8. *Rotate the bulb holder clockwise.*
9. *Install the headlight protective cover.*
10. *If the washer bottle filler neck was removed, install the filler neck.*
11. *Check the light operation.*



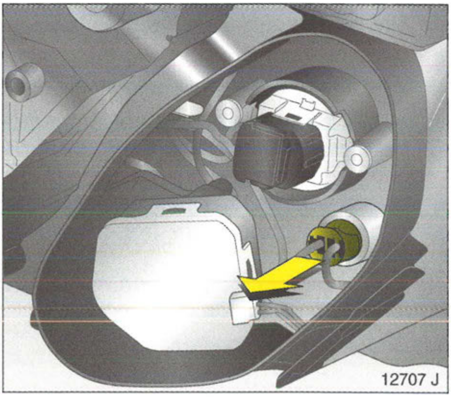
BULB REPLACEMENT cont.

Park lights

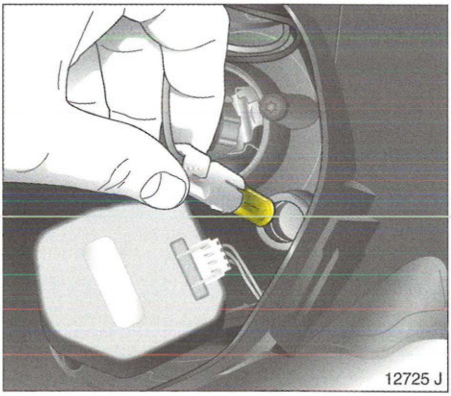
1. *Open the bonnet.*
2. *Remove the high beam protective cover.*



3. *Remove the park light bulb and bulb holder from the reflector.*
4. *Remove the bulb from the bulb holder.*
5. *Insert the new bulb so that the two lugs on the bulb base engage in the bulb holder recesses.*



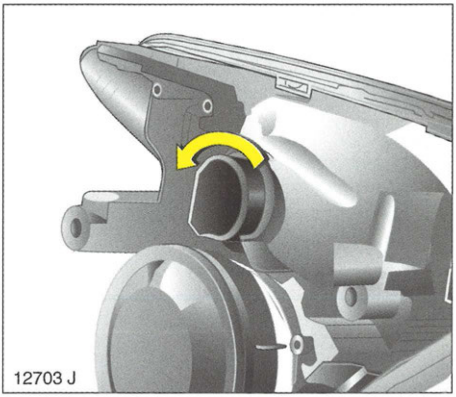
6. *Insert the bulb holder into the reflector.*
7. *Install the high beam protective cover.*
8. *Check the light operation.*



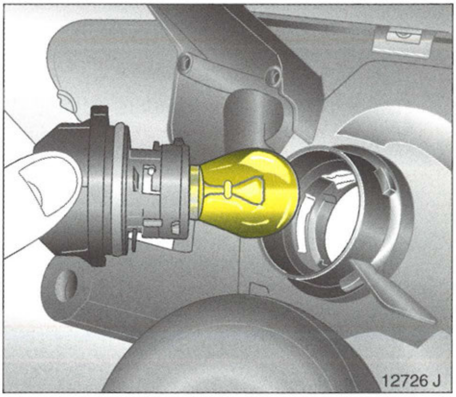
BULB REPLACEMENT cont.

Front turn signals

1. *Open the bonnet.*
2. *Disengage the bulb and bulb holder by turning it anticlockwise.*



3. *Remove the bulb from the bulb holder by pressing gently and turning it anticlockwise.*
4. *Insert the new bulb, locating the lugs at the side of the bulb with the recesses in the bulb holder. Gently press it into the holder as you turn the bulb clockwise.*
5. *Insert the bulb holder into the reflector.*
6. *Check the light operation.*



Holden Retailer bulb replacement

Bulb replacement for the following lights should be carried out by your Holden Retailer:

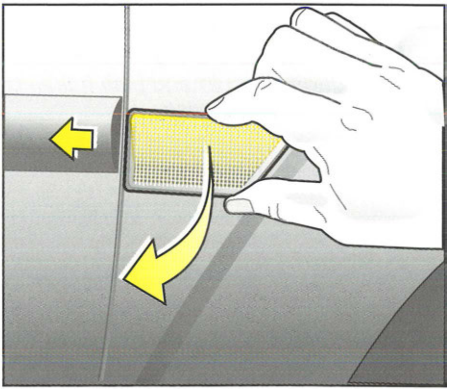
- *Instrument illumination.*
- *Information display illumination.*
- *Front fog lights (if fitted)*
- *Rear reading lights (if fitted)*
- *Sun visor lights*
- *Centre mounted stop light.*

BULB REPLACEMENT cont.

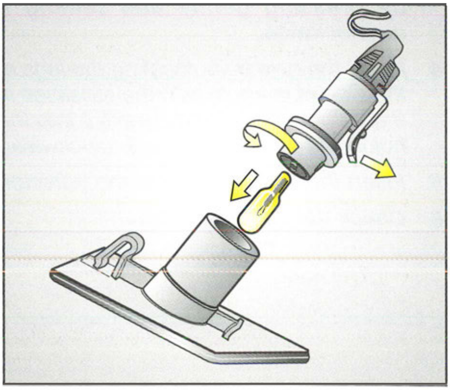
Side turn signals

Note: *Some models are fitted with a clear lens over a yellow coloured bulb. Ensure the correct coloured bulb is fitted when replacing a faulty bulb.*

1. *Grasping the rearward end of the lens, push forwards and manoeuvre the lens away from the body of the vehicle.*



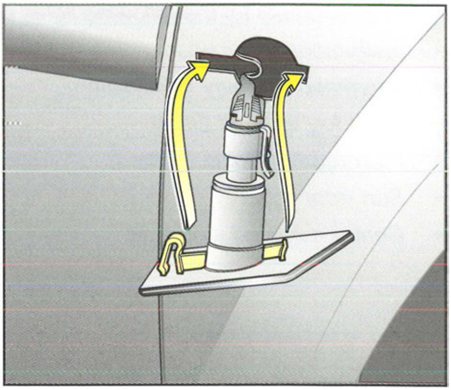
2. *Rotate the bulb holder anticlockwise and separate it from the lens assembly.*
3. *Pull the bulb out of the bulb holder.*



4. *Insert the new bulb into the bulb holder.*
5. *Install the bulb holder into the lens housing.*

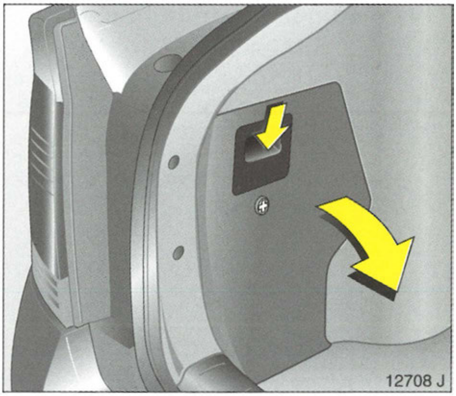
Note: *The bulb holder fits into the lens housing one way. Turn the bulb holder until it fits into place and can be tightened.*

6. *Install the rear of the housing into the vehicle body.*
7. *Push the front of the lens inwards and engage the clip.*
8. *Check the light operation.*

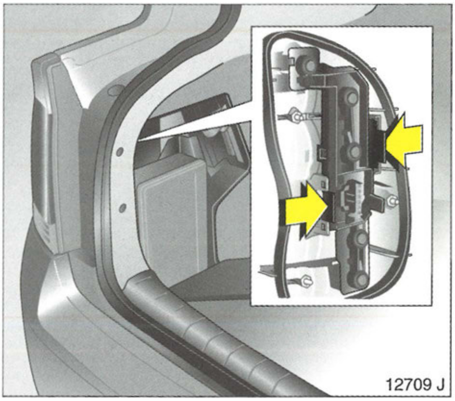


BULB REPLACEMENT cont.

Brakes, rear turn signals, reverse and tail lights, rear fog lights



1. *Remove the cover by pressing the bar and lifting out, as illustrated.*



2. *Detach the wiring connector from the bulb housing.*
3. *Press the two retaining lugs on the outer edges of the bulb housing towards each other and lift the bulb housing out.*

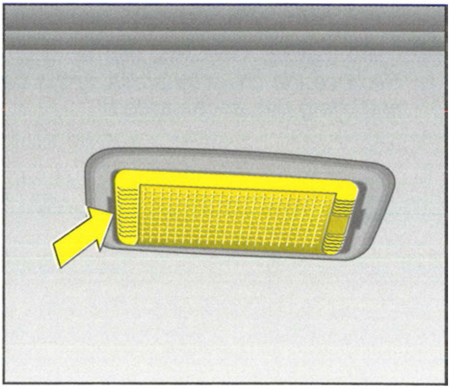
   BULB SEQUENCE
   From top to bottom:

   - *Turn signal light*
   - *Brake / tail light*
   - *Tail light*
   - *Fog light*
   - *Reverse light*
4. *Remove the faulty bulb from the bulb holder.*
5. *Insert the new bulb.*
6. *Install the bulb holder.*
7. *Install the cover.*
8. *Install the wiring connector to the bulb housing.*
9. *Check the light operation.*

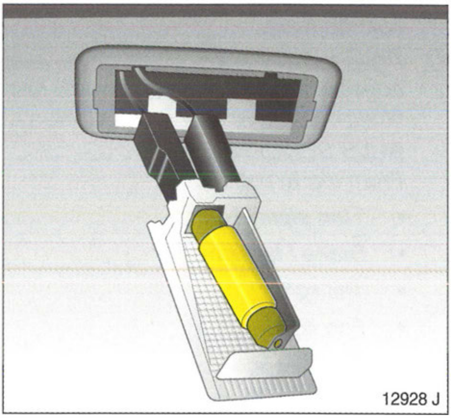
BULB REPLACEMENT cont.

Glove compartment light and luggage compartment light

Before removing the luggage compartment light, hold down the contact switch so that the light is not energised.



1. *Prise the light assembly out of the recess using a screwdriver.*



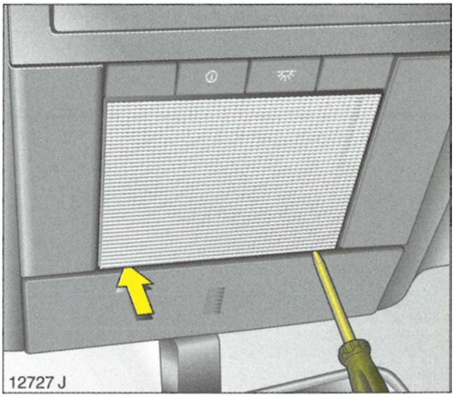
2. *Press the bulb slightly towards the spring clip and lift the bulb out.*
3. *Without touching the glass, insert the new bulb.*
4. *Install the light assembly.*
5. *Check the light operation.*

BULB REPLACEMENT cont.

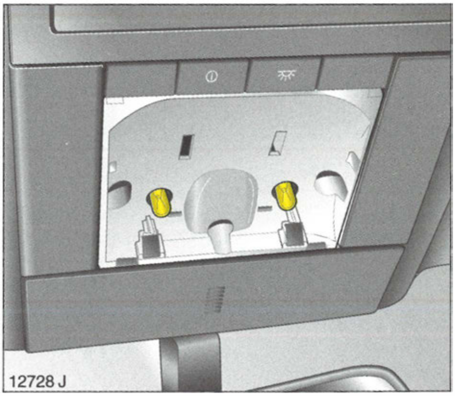
Front dome light and front reading light (if fitted)

Before removing the dome light, close the doors so that the light is not energised.

1. *Gently lever the lens out of the dome light housing using a screwdriver, as illustrated.*



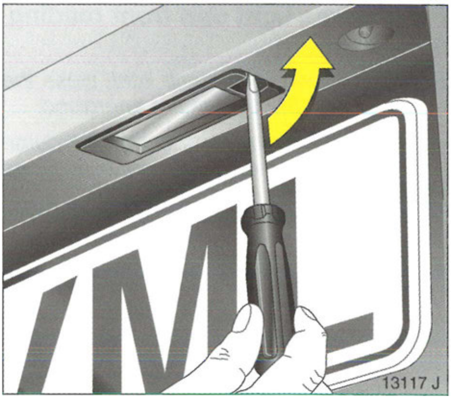
2. *Remove the bulb from the holder.*
3. *Insert the new bulb.*
4. *Install the lens into the dome light housing.*
5. *Check the light operation.*



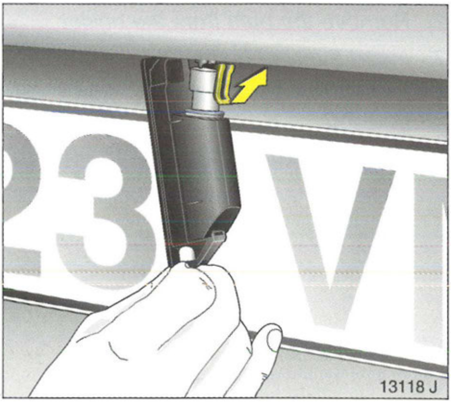
BULB REPLACEMENT cont.

Number plate light

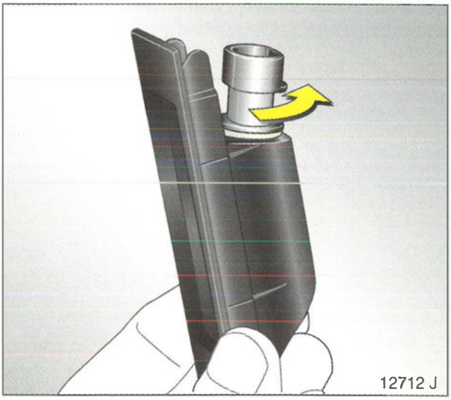
1. *Insert a screwdriver into the recess in the right-hand side of the light.*
2. *Press towards the right, as illustrated, and disengage the spring.*



3. *Manoeuvre the light housing out without pulling on the wiring.*
4. *Disconnect the wiring connector clip and detach the bulb holder from the connector.*



5. *Rotate the bulb holder anticlockwise to disengage it and remove the bulb holder (and bulb) from the light housing.*
6. *Remove the bulb from the bulb holder.*
7. *Insert a new bulb into the bulb holder.*
8. *Install the bulb holder into the light housing and engage the bulb holder by turning it clockwise.*
9. *Connect the wiring connector to the light housing.*
10. *Install the light housing.*
11. *Check the light operation.*



TRANSMISSION PARK LOCK

Automatic transmission

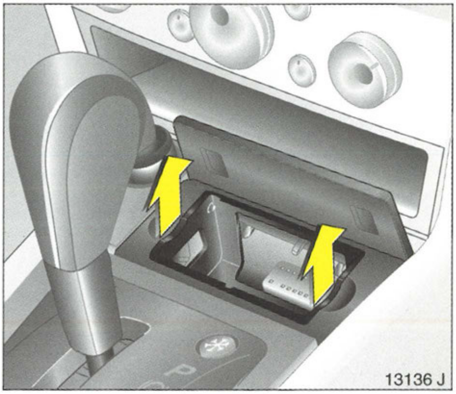
The transmission has an electric park lock so the key must be in the ignition (and the ignition on) before the shift lever can be moved away from **P** *(park).*

Park lock – flat battery

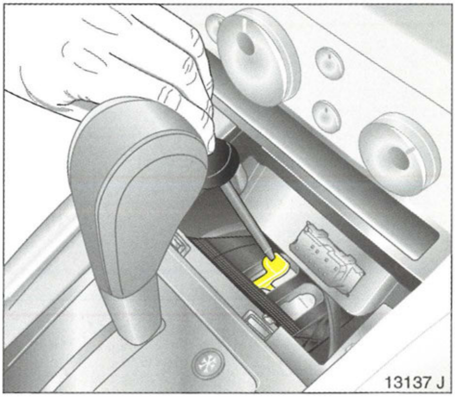
If the vehicle battery is flat, the electric park lock prevents the shift lever from being moved away from **P**.

Unlock the shift lever as follows:

1. *Apply the park brake.*
2. *Remove the ashtray as illustrated.*
3. *Pull the ashtray socket upwards and out.*



4. *Push the release bar down with a screwdriver as illustrated and move the shift lever away from the* **P** *position.*
5. *Install the ashtray socket into the centre console ensuring that it latches into position.*
6. *Install the ashtray.*



Note: *Returning the shift lever to* **P** *locks the lever again. Consult your Holden Retailer to repair the cause of the flat battery.*

CHAPTER 7

Weekly checks

Page

7-2 Miscellaneous checks
7-3 Engine oil level
7-5 Engine coolant level
7-6 Brake fluid level
7-6 Power steering fluid level
7-7 Washer fluid level
7-7 Battery
7-8 Tyres

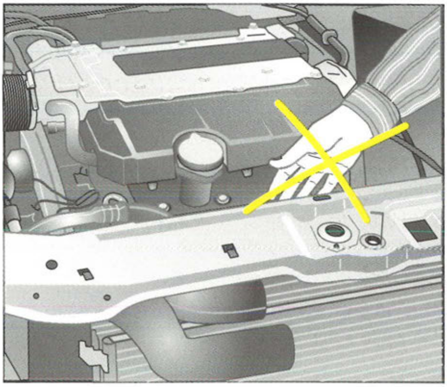
MISCELLANEOUS CHECKS

As well as taking your vehicle to be serviced (refer to Chapter 12) there are a few simple, weekly checks that the owner / operator is recommended to make. These are outlined on the following pages.

The following checks should also be regularly performed to ensure proper safety and dependability of your vehicle.

WARNING:

- **If the engine temperature is high, the cooling fan may remain on for several minutes after turning off the ignition.**
- **The engine cooling fan can start working unexpectedly, even when the engine is not running and the ignition is off.**



WARNING:

Electronic ignition systems have a high ignition power. Do not touch the ignition system; this could be highly dangerous.

Checks:

- *All exterior lights are working and that their appropriate interior indicators light up when in operation.*
- *Mirrors and glass are clean and not scratched.*
- *Automatic transmission shift lever indicator correctly lines up next to the gear selected.*
- *Aim of water on the windscreen and tailgate and the condition of the wipers is satisfactory.*
- *Demister operates.*
- *Safe condition and operation of all seat belts (give each belt a sharp tug to make sure that it 'locks').*
- *Seat belt buckles are clean and operating correctly.*

ENGINE OIL LEVEL

It is normal for every engine to consume some oil. For this reason the engine oil level should be checked every 500 km and before starting a long trip.

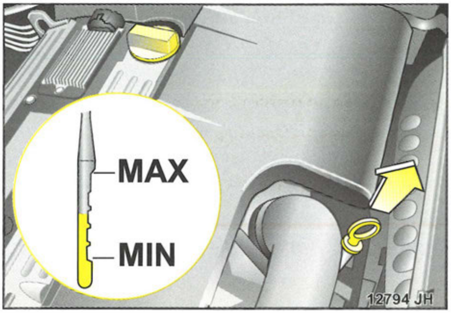
Check the oil level

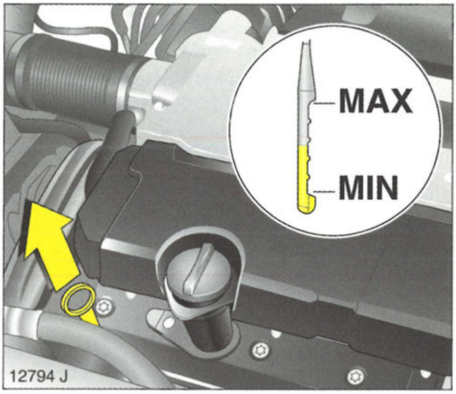
Check the oil level while the vehicle is parked on level ground and the engine is switched off and at normal operating temperature.

Before checking the oil level, wait at least 5 minutes after switching the engine off, to allow the oil to settle. If the engine is cold the oil may take considerably longer to drain back.

1. *Remove the oil dipstick from the oil level tube.*
2. *Wipe the dipstick clean.*
3. *Insert the dipstick back into the oil tube as far as it will go.*
4. *Wait for a few seconds before again removing the dipstick.*
5. *Check the oil level.*

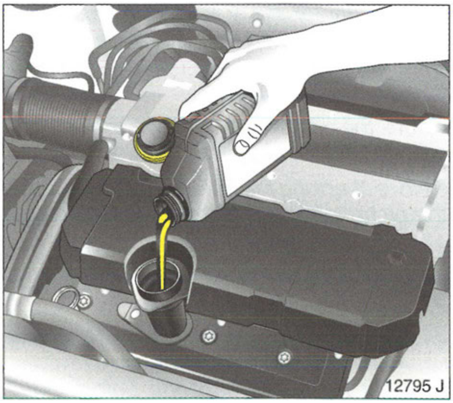
The oil level should be maintained between the MIN and MAX level indicators.





ENGINE OIL LEVEL cont.

Add oil



Use the correct engine oil for your vehicle. Refer to Chapter 8.

1. *Remove the engine oil cap.*
2. *Add oil to bring the level to the MAX level. As a guide, the distance between the marks represents 1 litre.*

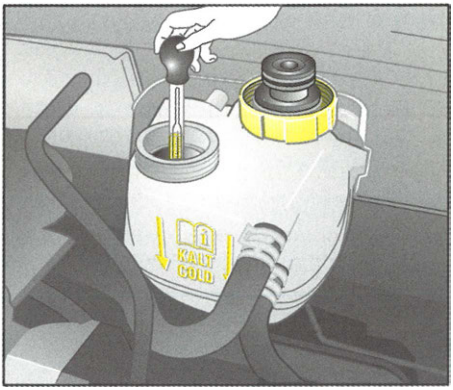
   Note: *If the oil level goes above the MAX level, the excess oil must be removed as there is a risk of damage to the engine or to the catalytic converter.*
3. *Wait a few minutes for the oil to settle then check the oil level again. When the level is correct, install the oil cap and the dipstick and clean up any spilt oil.*

Oil consumption should not be judged until the vehicle has run several thousand kilometres. It may take this long for the oil consumption to stabilise.

WARNING:

Non-detergent and other low quality oils are specifically not recommended. The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives is not recommended. Their use will increase costs, may be detrimental to the operation of your vehicle and may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended fluid to have affected the specifications or quality of your Holden vehicle.

ENGINE COOLANT LEVEL



The level of coolant should be checked at least weekly. This is simply a matter of looking at the level in the plastic container when the engine is cold.

When the engine is cold, the level should be slightly above the KALT / COLD mark. The level rises when the engine is running and drops again when the engine cools down. If the level falls below the COLD mark, the coolant should be topped up to a little over the mark.

The coolant required by your vehicle is specified in Chapter 8.

Topping up

If topping up, first mix a solution of 50% coolant and 50% water. Failure to use the coolant meeting Holden's specification or maintaining the specified concentration may result in voiding your New Vehicle Warranty.

In an emergency, plain water may be used temporarily in the cooling system until the correct Holden coolant is obtained. Replace with the correct solution as soon as possible from the nearest Holden Retailer.

Note: *The specified coolant contains special corrosion inhibitors for the best corrosion protection of your engine and cooling system. This coolant also gives your cooling system greater hot weather protection by increasing the boiling point and in addition provides protection in cold weather conditions down to –28°C, provided the correct concentration is maintained. It remains in the cooling system throughout the year and does not need to be changed.*

If you regularly have to top up the cooling system, you should see your Holden Retailer.

WARNING:

Corrosion inhibitors and antifreeze fluids are poisonous. Use extreme care when handling. If swallowed seek medical attention. Do not remove the cooling system cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

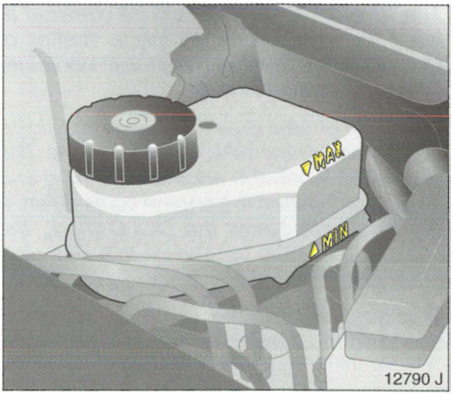
Refer to Chapter 6 if the engine overheats.

BRAKE AND POWER STEERING FLUID LEVEL

Brake fluid level

WARNING:

Brake fluid is poisonous and corrosive. It will damage the paint finish of your vehicle if spilt.



The brake fluid in the master cylinder should be checked weekly. The master cylinder is located on the driver's side of the engine bay.

The fluid level, visible through the plastic reservoir, should be between the MIN and MAX level marks.

Do not remove the master cylinder cap if the fluid level is between these marks. Brake fluid exposed to the atmosphere quickly absorbs moisture. Moisture in brake fluid lowers the boiling point of the fluid and increases the risk of corrosion to brake components.

If you need to add fluid, use the correct brake fluid for your vehicle. Refer to Chapter 8.

Clean around the cap, add the brake fluid, secure the cap and wipe up any spilt fluid.

WARNING:

Use only new brake fluid. Use of old, used or inferior brake fluid may endanger the functioning of the brake system. Brake fluid in your vehicle must be completely replaced every two years.

If the master cylinder requires constant topping up, a problem may exist. Have a Holden Retailer check the system as soon as possible.

Power steering fluid level

The fluid level for power steering will be checked for you when your vehicle is taken to your Holden Retailer for servicing. Refer to Chapter 12. The power steering fluid level does not require checking in between these scheduled services.

WASHER FLUID LEVEL AND BATTERY

Washer fluid level

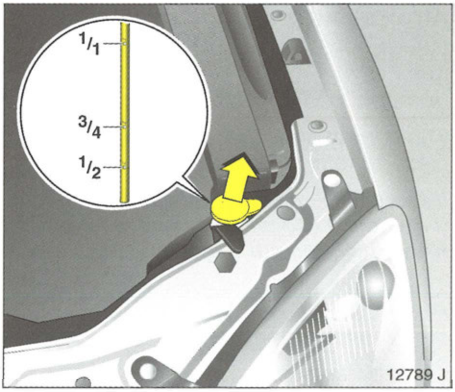
As the washer fluid is constantly used, the level should be checked weekly and topped up as required.

The washer container is located on the passenger side of the engine bay and supplies both the windscreen and rear washers (if fitted).

To fill, open the flip top cap and add fluid.

For a crystal clear windscreen, the correct amount of cleaner can be added. Refer to Chapter 11. Do not use ordinary soap or detergent as these can froth up and damage the rubber wiper blades.

Secure the cap after filling.

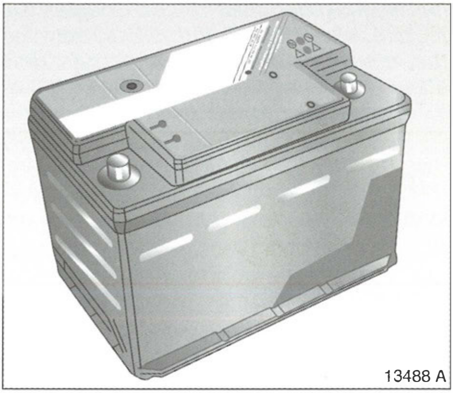


Battery

Your vehicle is fitted with a maintenance free battery, so the fluid level does not need to be checked.

When replacing the battery, always replace it with another maintenance-free battery of the correct specifications. Refer to Chapter 8.

Note: *Never disconnect the battery when the engine is running.*



BATTERY CHARGING

Never charge the battery while it is still connected to the vehicle. If removing the battery for recharging, first disconnect the negative cable then the positive cable.

When reconnecting the battery, first connect the positive cable to the positive post of the battery then connect the negative cable to the negative post of the battery.

If the vehicle is not used for more than four weeks, the battery could become discharged. This can shorten the service life of the battery. To avoid this, disconnect the negative cable from the battery and reconnect it when you are ready to use the vehicle.

Radio settings are lost when the battery is disconnected. When reconnecting the battery, you will be required to enter the radio security pin number.

TYRES

Air pressure

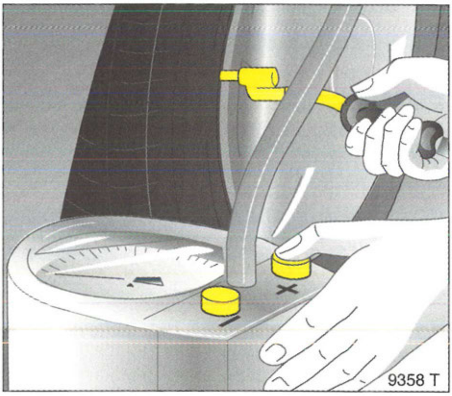
Weekly checking of the air pressure of your tyres (including the spare) increases safety, reduces fuel consumption and increases the life of the tyres. For constant long distance or rough road driving, check the tyres daily.

The correct pressure for your tyres is shown on the tyre placard. For the location of the placard, refer to Chapter 8.

If the vehicle is heavily loaded, the recommended pressure for the tyres is increased (refer to the tyre placard). The weekly air pressure check becomes even more important when the tyres are operating under greater load, .

Tyre air pressure increases when the tyres have been driven more than 2 km. Therefore, the pressure should be checked when the tyres have been stationary for three hours. If they must be checked immediately after driving, increase the pressure shown on the placard by 10%.

The inflation pressure in the tyres should be increased according to the load on the vehicle. Therefore, if the vehicle is loaded to half the maximum load (refer to Chapter 10), the tyres should be inflated half way between the minimum and maximum pressures shown on the tyre placard. Vehicles driven for prolonged periods over rough roads, particularly in outback conditions, should use the cold tyre inflation pressure on the tyre placard under maximum load conditions.



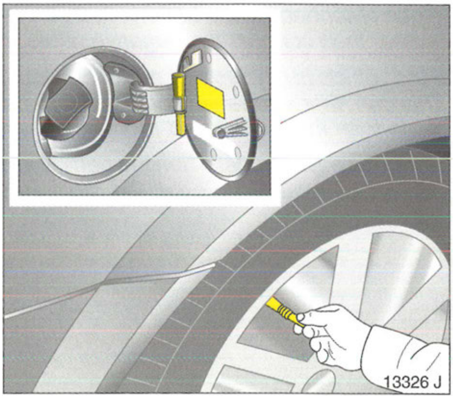
Always use a tyre pressure gauge to check the tyres. Simply looking at the tyres is not sufficient.

If the pressure is too low, the tyres heat up and internal damage can result. This can lead to tread separation and even tyre blowout at high speeds.

If the pressure is too high, reduced traction, increased risk of tyre blowout and poor tyre wear can result.

Replace missing valve caps or extensions to stop dirt and moisture from fouling the valves. When checking the tyre pressure, look at the condition of the tread and inspect the tyre for lodged stones or abnormal wear. If unsure, have your Holden Retailer check the tyres.

Use the valve cap tool, located on the inside of the fuel filler flap, to unscrew the valve caps more easily.



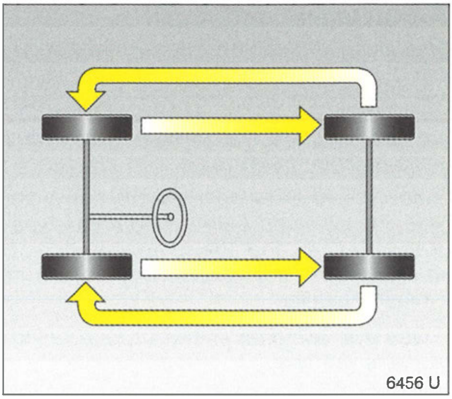
TYRES cont.

Tyre rotation

Front and rear tyres perform different jobs. They can wear differently depending on the types of roads driven, your driving habits, wheel alignment and balance, tyre pressures etcetera.

Tyre condition will be checked for you when you take your vehicle to be serviced by your Holden Retailer. The Retailer will be able to diagnose any unusual signs of wear.

If the tyres are rotated, it is recommended that the wheel balance be checked at the same time.



Alignment and balance

Improper wheel alignment can cause the tyres to wear faster and unevenly. It can also cause the vehicle to 'pull' to the left or right.

Out-of-balance wheels and tyres can cause vibration and uneven tyre wear, such as cupping and flat spots.

If you suspect that either of the above problems exist, have your Holden Retailer check the vehicle.

TYRES cont.

Replacement and repair

Replacing your factory fitted wheels and tyres with non-specified wheels and tyres may affect your warranty as well as your insurance policy. Refer to the tyre placard on your vehicle for tyre size and load rating. Refer to Chapter 8.

Using a different size or type of tyre may affect ride, handling, speedometer reading, vehicle ground clearance, tyre clearance or snow chain clearance.

Take care when using tyres with heavy treads, including tyres made for better grip in the wet. At sustained high speeds, this type of tyre will run at higher temperatures than standard tyres and should only be operated within the limits recommended by the tyre manufacturer. If you have any doubts about the tyres on your vehicle, consult your Holden Retailer.

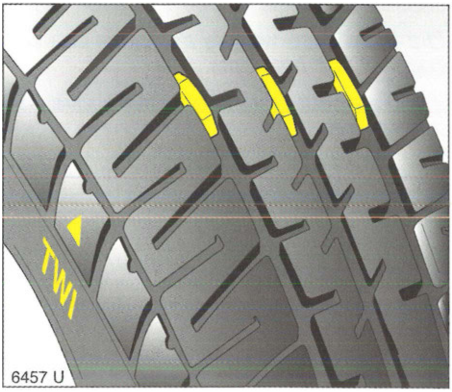
Tyres with a higher speed or load rating are acceptable provided they are fitted to a suitable rim size.

New tyres should be fitted in pairs to the front wheels. If replacing only one tyre, it should be paired with the least worn of the other three.

Replace your tyres if any of the following occur:

- *The tyre is worn to the point where the tread indicators appear or the cord or fabric is showing.*

  The tyres originally fitted to your vehicle have built-in tread indicators. When 2 to 3 mm of tread remains, these indicators show as plain bars across the tread pattern. Their location is indicated by markings on the tyre side-wall.
- *The tread or side-wall is cut, split or cracked deep enough to expose the cord or fabric.*
- *The tyre has a bump or bulge in it, indicating internal tyre damage.*
- *The tyre has a puncture, cut or other damage which cannot be repaired due to the size or location of the damage.*



Do not attempt to drive on the flat tyre more than is necessary to stop safely. Driving even a short distance can damage the tyre and wheel beyond repair. Tyres which have been repaired or retreaded cannot be driven safely at high speeds. Therefore, their use is not recommended.

Notes

CHAPTER 8

Specifications

Page
8-2 Vehicle specifications
8-4 Identifications labels

VEHICLE SPECIFICATIONS

Engine type	Z 22 SE DOHC	Z 32 SE DOHC
Engine capacity	2.2 litre	3.2 litre
No. of cylinders	4	6
Bore	86 mm	87.5 mm
Stroke	94.6 mm	88 mm
Compression ratio	10:1	10:1
Piston displacement	2198 cc	3175 cc
Power	108 kW @ 5600 rpm	155 kW @ 6200 rpm
Maximum Torque	203 Nm @ 4000 rpm	300 Nm @ 4000 rpm
Oil specification	ACEA specification A2 or A3. viscosity grade 5W-40 or 5W-50	
Refill oil capacity (including filter)	5.0 litres	4.75 litres
Fuel tank capacity	61 litres	61 litres
Coolant capacity	7.4 litres (manual) 7.6 litres (automatic)	7.7 litres (manual) 7.9 litres (automatic)
Coolant spec	50% water and 50% extended-life anti-freeze coolant conforming to GM6277M specification	

Note: *Power and Torque figures are based on the use of regular unleaded fuel (91 RON).*

Brake fluid	Heavy duty brake fluid meeting S.A.E specification J1704, DOT 4

VEHICLE SPECIFICATIONS cont.

Transmission

	5 speed manual	5 speed automatic
Fluid specification	Gear oil meeting Holden specification no. HN2354 (Castrol SMX-O or equivalent)	Automatic transmission fluid meeting Holden specification no. HN2414 (ESSO JWS 3309)
Capacity	1.85 litres approx.	4 litres approx.

Dimensions (mm)

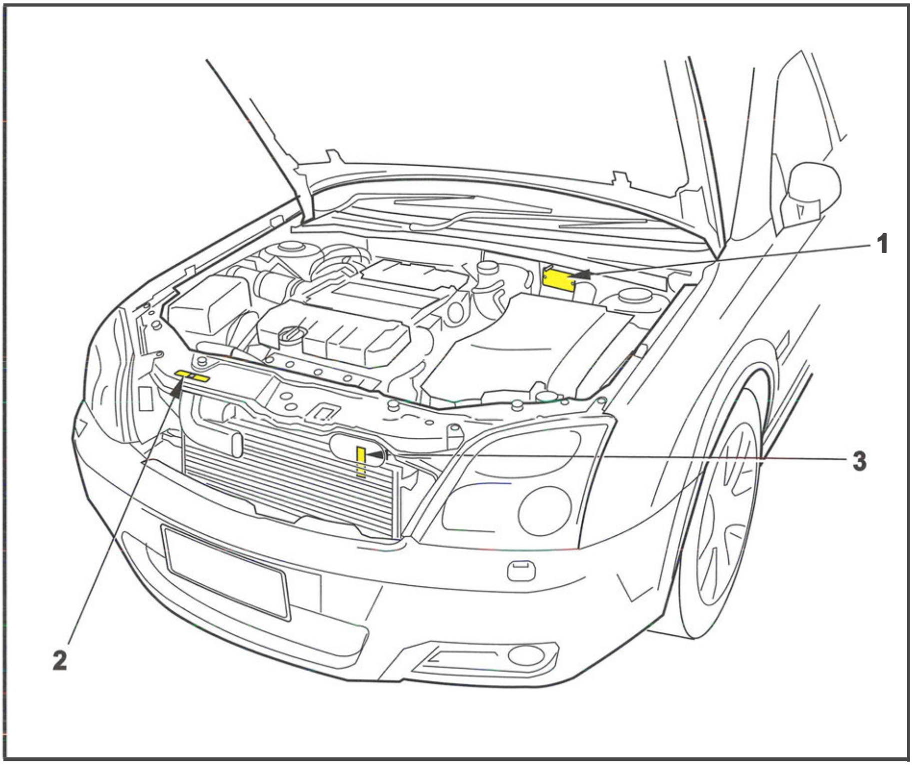
	CD Sedan	CD Hatch	CDX Hatch	CDXi Hatch
Overall length	4596			
Overall height	1460			
Overall width (inc. mirrors)	1798			
Wheelbase	2700			
Front track *	1525			
Rear track *	1514			1517
Ground clearance *	109	109 (Z 22 SE) 111 (Z 32 SE)		

*** (with standard tyres)**

Battery

Volts	12
Amps	66 amp / hours

IDENTIFICATION LABELS



1 Compliance plate

The plate shows the vehicle approval number, category code, make, model, seating capacity and ISOVIN. The ISOVIN should be used for identification with spare parts. Refer to Vehicle identification number (ISOVIN) in this chapter.

2 Holden identification plate (if fitted)

The Holden number on the Holden identification plate is used for warranty identification and Roadside Assistance identification.

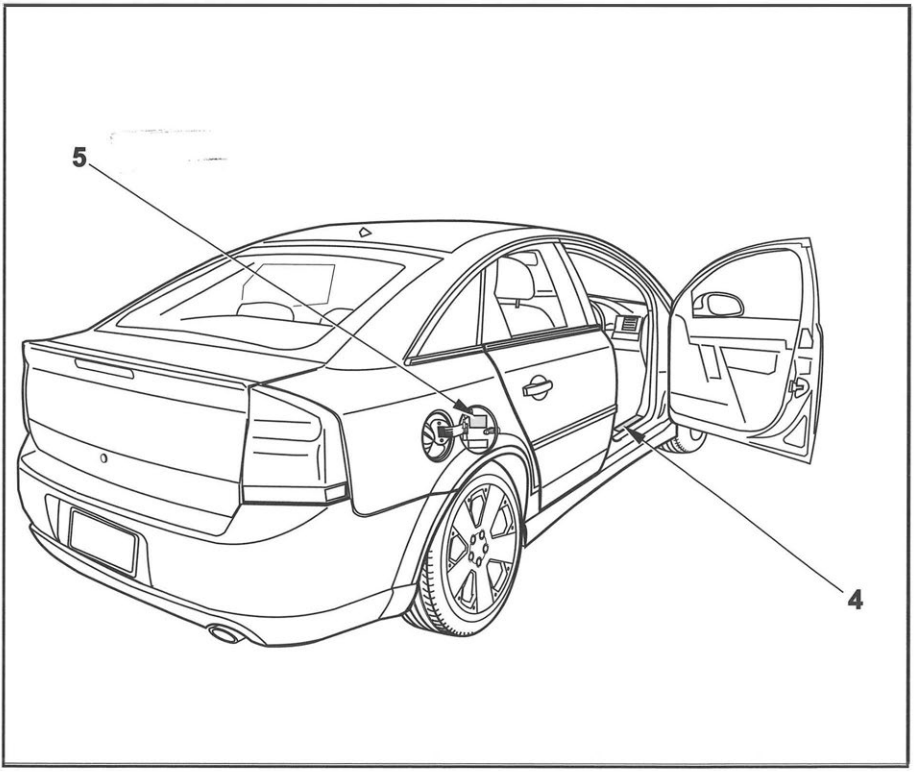
3 Engine Number

Individual identification numbers are stamped onto the engine.

2.2 4CYL (Z 22 SE) - Engine Block - Front lower left hand side.

3.2 V6 (Z 32 SE) - Engine Block - Front lower left hand side.

IDENTIFICATION LABELS cont.



4 Vehicle identification number stamp

This stamp shows the ISOVIN, which should be used for identification with spare parts. Refer to Vehicle identification number (ISOVIN) in this chapter. This number is also stamped onto the sill inner panel, under a cover.

5 Tyre placard

The tyre placard shows the recommended tyre pressures. Refer to Chapter 7.

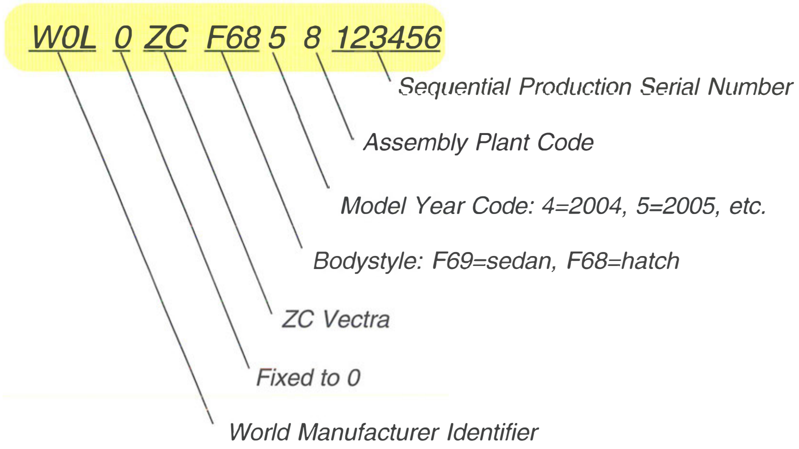
IDENTIFICATION LABELS cont.

Vehicle identification number (ISOVIN)

The vehicle specific ISOVIN appears on the Safety Compliance Plate. This number is used for identification of parts. This identification number appears on:

- *the compliance plate*
- *the option code plate (if fitted)*
- *the vehicle identification number stamp*
- *the vehicle identification number label.*

Example ISOVIN


W0L 0 ZC F68 5 8 123456
Sequential Production Serial Number
Assembly Plant Code
Model Year Code: 4=2004, 5=2005, etc.
Bodystyle: F69=sedan, F68=hatch
ZC Vectra
Fixed to 0
World Manufacturer Identifier

Notes

CHAPTER 9

Customer Assistance

Page

9-2	Customer assistance
9-3	For New Zealand Holden owners
9-4	Roadside assistance
9-6	New vehicle warranty
9-8	Parts and accessories warranty
9-9	Warranty questions and answers

CUSTOMER ASSISTANCE

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.

Normally, any problems with the sales, operation, servicing or the validity of original equipment supplied with your vehicle will be handled by your Holden Dealer's Sales and Service Department.

We realise however that, with the best intentions, misunderstandings do occur sometimes.

☞ *Therefore, we suggest you discuss any concern with one of the Holden Dealer's management people. If you have not received satisfaction from the Sales Manager or Service Manager – go to the General Manager or to the Dealer Principal.*

By now you should have satisfaction. If not, the Holden Customer Assistance office is at your disposal.

☎ *The Holden Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The Melbourne area number is:*

9646 5466

Outside the Melbourne Metropolitan area, the number is:

1800 033 349

If your concern relates to parts / accessories and you have made contact with the Dealer or Distributor without satisfaction, you may contact Holden Service Parts Operations on (03) 9797 7341.

Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

✉ *The Manager*
Holden Customer Assistance Centre
GPO Box 1714
Melbourne, 3001.

Your letter should clearly outline your concern or query, and include the following:

✍
- *Your name and address.*
- *Telephone numbers, both private and business.*
- *Servicing Dealer's name and address.*
- *Vehicle model.*
- *Vehicle identification number (I.S.O.V.I.N.), refer to the inside front cover of the service booklet in your vehicle's glovebox.*
- *Date of purchase.*
- *Current odometer reading.*

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of the service booklet in your vehicle's glovebox.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

FOR NEW ZEALAND HOLDEN OWNERS

The information in this Owner's Handbook applies primarily to Australian Holden vehicles and there may be some differences to the Warranty and Owner Assistance provisions for New Zealand. Applicable details for New Zealand are set out in the Holden Warranty and Owner Assistance Information booklet enclosed in the New Zealand glovebox wallet.

New Zealand Assistance can be reached on:

☎ **0800 HOLDEN (0800 465 336)**

This number provides access to New Zealand Roadside Assistance as well as New Zealand Customer Assistance.

If you prefer to write the address is:

✉ *The Manager*
Holden Customer Assistance Centre
GPO Box 1714
Melbourne,
Australia, 3001.

ROADSIDE ASSISTANCE

3 YEAR
24 HOUR ROADSIDE ASSISTANCE

Our commitment to your satisfaction

Holden's Roadside Assistance is part of the unequalled commitment by Holden to provide total motoring satisfaction.

From the moment delivery is made, our aim is to provide the finest possible ownership experience, from design through manufacturing to servicing and now beyond to the open road, Australia wide.

We hope the need never arises, but if it does, we'll be there to help through Holden Roadside Assistance.

How does Holden Roadside Assistance work?

Holden Roadside Assistance is provided by Holden Ltd. and delivered by the collective resources of the Australian Automobile Clubs and Associations including the constituents of Assist Australia (AA). To request a copy of the terms and conditions, contact Customer Assistance Service Line on 1800 033 349.

Which vehicles are covered by the service?

As of 1st November 1993 all new Holden passenger and light commercial vehicles are covered for 36 months from the date of first registration.

Holden Roadside Assistance is extended to private and business vehicles, taxis, rental companies, all government and fleet operators.

What will Holden Roadside Assistance do for me?

Holden Roadside Assistance is designed to get you mobile on any road that is trafficable to normal two wheel drive vehicles. In the event of the unexpected happening, from your keys being locked in your vehicle to mechanical and accident advice, help is readily available by simply calling the toll free number 1800 817 100.

All Holden luxury vehicles receive the added benefits of Holden Roadside **Ultra** *Assist which includes accommodation, alternative transport, rental vehicle, assistance in case of accident, theft and medical emergency and Australia wide vehicle recovery.*

Can I upgrade to Roadside Ultra assist?

Yes, owners can upgrade to Holden Roadside **Ultra** *Assistance for a fee by dialling 1800 645 668. To request a copy of the* **Ultra** *terms and conditions, contact Customer Assistance Service Line on 1800 033 349.*

ROADSIDE ASSISTANCE cont.

When do the benefits begin?

Cover begins from the date of first registration. An interim card entitles you to immediately receive all the benefits of Holden Roadside Assistance.

Where can I get Roadside Assistance?

Holden Roadside Assistance is available to you at home, or at the roadside, anywhere in Australia, should you need it. In remote or sparsely populated areas you may experience delays in obtaining Roadside Assistance due to your location, the availability of the service provider and accessibility.

Is there a membership or joining fee?

No, Holden Roadside Assistance is complimentary with every new Holden passenger vehicle and light commercial vehicle for 36 months from the date of first registration.

What will Holden Roadside Assistance cost me?

Materials, fuel and spare parts must be paid for at the time of service. The service personnel attending will issue a receipt for these expenses. Reimbursement of expenses covered by Holden's warranty can be claimed by contacting your local Holden Dealer.

What happens if I sell my vehicle?

Holden Roadside Assistance stays with the vehicle, so if you sell your vehicle during the 36 month period, it is still eligible for the balance of the Holden Roadside Assistance. The new owner simply registers for the service by using the change of ownership form supplied in the Roadside Assistance booklet.

How do I call for assistance?

Simply call Holden Roadside Assistance toll free on 1800 817 100 from anywhere in Australia. For further information regarding the service and full terms and conditions, refer to the Roadside Assistance Kit in the glovebox or call the toll free Customer Assistance Service Line on 1800 033 349.

NEW VEHICLE WARRANTY CERTIFICATE

New Vehicle Warranty application

This Warranty is given by Holden Ltd., ABN 84 006 893 232, ('Holden'). The Warranty applies to the vehicle identified on the inside front cover of the service booklet in your vehicle's glovebox. It is provided to the original and subsequent owners / operators driving the vehicle within Australia during the Warranty Period.

This Warranty is given in addition to all rights conferred by law on that person.

Australian vehicles

This Warranty is only applicable to vehicles purchased and operated in Australia.

Owners of vehicles purchased in Australia but operated overseas should consult the local Dealer in the country of operation about any Warranty applicable to their vehicle. This Warranty does not apply for Holden vehicles exported overseas. Similarly, this Warranty is not provided for vehicles purchased overseas and imported into Australia.

Repairs covered

Subject to the exclusions shown on the following page, this Warranty covers the correction, during the Warranty Period, of any vehicle defect related to materials or workmanship and advised to a Holden Dealer or Authorised Service Outlet, by repair or at Holden's option by replacement.

100,000kms
3
years

Warranty Period

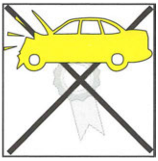
The coverage commences from the date of delivery (or in the case of a demonstrator vehicle the date when the vehicle was first placed into service by the Dealer). The coverage expires at the end of the period of 3 years after the commencement date or after the vehicle has travelled 100 000 kilometres, whichever occurs first.

No charge

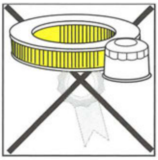
Warranty work undertaken (including parts and labour) will be carried out at no cost to the vehicle owner. However, this work should not be confused with servicing specified in the Maintenance schedule in the service booklet for which a charge is payable.

NEW VEHICLE WARRANTY CERTIFICATE cont.

Warranty exclusions

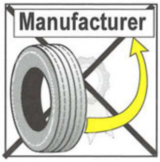


- **Damage**
  Your Warranty does not extend to the following damage:
  Damage caused by an accident, fire, theft or moving objects striking the vehicle.
  Damage caused by industrial fallout, chemicals or sealants.
  Damage caused by atmospheric fallout or flood, hail, salt, etc.



- **Maintenance items**

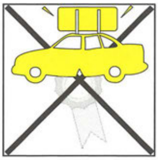
  Services such as brake adjustment, replacement of filters, wiper rubbers etc., which are required as part of normal vehicle maintenance (refer to the service booklet in your vehicle's glovebox).



- **Tyres**

  The tyres (and tubes where applicable) fitted to your vehicle are not covered by this Warranty. However, they may be covered by the tyre manufacturer.

- **Batteries**
  Batteries are warranted for 12 months.



- **Misuse**
  This Warranty does not cover damage caused by:
  (a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc., or neglect
  (b) operation of the vehicle after the defect is known
  (c) failure to carry out proper maintenance services (refer to the service booklet in your vehicle's glovebox)
  (d) use of incorrect types and grades of fuel, oil or lubricants
  (e) alteration of the vehicle by anyone not authorised by Holden
  (f) fitting of parts or accessories not recommended by Holden
  (g) any work carried out on the vehicle by anyone except an authorised Holden Dealer or authorised Service Outlet.

PARTS AND ACCESSORIES WARRANTY

Holden warrants Holden approved Parts and Accessories ('Parts' and 'Accessories') for the periods and on the conditions set out below. The Warranty covers the correction, during the relevant Warranty Period, of defects in any such Parts and Accessories, by repair or at Holden's option by replacement.

- **Accessories installed to the new vehicle**

  Holden approved Accessories installed by a Holden Dealer or authorised Service Outlet to the new vehicle at the time of purchase are covered together with the New Vehicle warranty for the period of 3 years or 100 000 km, whichever occurs first.

- **Parts and Accessories installed after new vehicle delivery by a Holden Dealer or authorised Service Outlet**

  Parts and Accessories installed after new vehicle delivery by a Holden Dealer or authorised Service Outlet are covered for 2 years or 50 000 km (whichever occurs first). If the vehicle is still within the New Vehicle Warranty the Parts and Accessories are covered by the longer of:

  2 years / 50 000 km (whichever occurs first)

  or

  the end of the New Vehicle Warranty.

  As an example, an Accessory installed in a 7 month old vehicle would be covered until the end of the New Vehicle Warranty; an Accessory installed in a 2½ year old vehicle would be covered until the end of 4½ years or a further 50 000 km from when the Accessory was installed.

- **Purchased at retail or trade**

  Parts and Accessories purchased at trade or retail and installed by other than a Holden Dealer or authorised Service Outlet are warranted for 1 year from the date of purchase. Please keep a receipt to support warranty claims.

  The Warranty does not cover the labour costs of removal / reinstallation of Parts and Accessories when installed or rectified by other than a Holden Dealer or authorised Service Outlet.

- **Parts and accessories warranty exclusions**

  The tyres (and tubes where applicable) are not covered by this warranty. However, they may be covered by the tyre manufacturer.
  Batteries are warranted for 12 months from date of purchase.
  Parts which are required as part of normal vehicle maintenance are warranted against manufacturing defect at the time of installation. Consult your Holden Dealer to confirm the period of this warranty.

WARRANTY QUESTIONS AND ANSWERS

This section is designed to assist you in understanding the Holden Warranty provided with your new vehicle.

The following are some of the most frequently asked questions for which detailed answers are provided.

Q 1. How do I go about obtaining Holden Warranty service?

It is the responsibility of the Selling Dealer to provide Holden Warranty service, therefore, you should take your vehicle to the Selling Dealer whenever Holden Warranty service is needed· However, if this is not possible, you may go to any other Authorised Holden Dealer. The details recorded inside the front cover of the service booklet will be required by the Dealer.

Q 2. What should I do if my vehicle becomes unsafe or inoperative as a result of a defect which is covered by the Holden New Vehicle Warranty?

You should contact the nearest Authorised Holden Dealer or Holden Customer Assistance Service as soon as possible, and arrange for that Dealer to carry out the required Holden Warranty Service.

Q 3. What should I do if, in an emergency, Holden Warranty service is required and an Authorised Holden Dealer is not available to provide such service at the time?

If, in an emergency, a repair, replacement or adjustment (covered by the Holden New Vehicle Warranty) is required to enable your vehicle to be operated safely and it is not practical for you to go to an Authorised Holden Dealer, the service (to the extent that it is necessary to enable your vehicle to be operated safely) may be performed by any other qualified mechanic or repairer. A claim for the reasonable cost may be made through the authorised Holden Dealer who would normally provide you with Holden Warranty service. You must also take your vehicle to the Authorised Holden Dealer for inspection of the service and / or completion of any required Holden Warranty service, as soon as possible.

Note: *During normal business hours you should seek authorisation from your nearest Authorised Holden Dealer or Holden Customer Assistance Service, prior to repairs being commenced.*

Q 4. Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the Holden Warranty?

No, these items are not covered· Holden warranty only covers the repair, replacement or adjustment of those parts of your vehicle which are found to be defective in materials or workmanship. No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your vehicle, will be recognised under the Holden New Vehicle Warranty.

You may have rights under the law to claim compensation outside of the Holden New Vehicle Warranty, but any claim based on those rights should be separately pursued.

WARRANTY QUESTIONS AND ANSWERS cont.

Q 5. Will I have to pay for maintenance costs during the Warranty Period?

Maintenance costs are not covered by the Holden New Vehicle Warranty. The Maintenance Schedules in the service booklet (in your vehicle's glovebox) specify the minimum maintenance required for your vehicle operating under normal conditions.

The Maintenance items (except where they are required as a result of defects in materials or workmanship) for which you will have to pay include:

- *Engine tune-up, including spark plugs replacement.*
- *Replacement of all filters, engine and other belts, hoses , wiper blades and clutch linings.*
- *Cleaning or flushing of fuel, coolant, brake, engine, transmission, differential, power steering etc., after 1500 km.*
- *Carbon and sludge removal.*
- *Maintenance servicing of emission control system devices.*
- *Adding to (or replacing) lubricants.*
- *Adding to (or replacing) air conditioning refrigerant, after 1500km.*
- *Any necessary adjustments to drive belts, transmissions, clutch, park brake etc.*
- *Wheel balancing – after 1500km.*
- *Wheel alignment.*
- *De-dusting or de-glazing of brake linings or pads – after 1500km.*
- *Brake lining wear or damaged brake components due to lining wear.*
- *Clutch lining wear or damaged clutch components due to lining wear.*
- *Brake disc pad or disc wear.*
- *Battery recharging.*
- *Paint, bright metal finish and trim, due to normal deterioration.*
- *Body panel adjustment – after 1500 km.*
- *Door, or bonnet lock adjustments.*
- *Glass or channel adjustments – after 1500km.*
- *Body rattle, squeaks and general tightening of bolts, fasteners and fittings – after 1500 km.*
- *Chipped glass or breakage.*
- *Torn or damaged floor mats or carpets.*
- *Normal wear and tear to trim components.*

Q 6. Are my tyres covered by the Holden New Vehicle Warranty?

No. The tyres fitted to your vehicle are covered by a separate warranty provided by the tyre manufacturer. Any Authorised Holden Dealer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturer's representative.

WARRANTY QUESTIONS AND ANSWERS cont.

Q 7. Will I have to pay for any costs or expenses in connection with the provision of Holden Warranty service?

All parts and labour used in carrying out Holden Warranty service at the premises of the servicing Holden Dealer are free of charge. Whenever Holden Warranty service is to be carried out by the servicing Holden Dealer it is your responsibility to deliver your vehicle to the servicing Holden Dealer's premises.

If, as a result of a defect which is covered by the Holden New Vehicle Warranty, your vehicle cannot be driven safely and you arrange for the nearest Authorised Holden Dealer to carry out the required Holden Warranty service, Holden will accept reasonable towing costs to move your vehicle to the nearest Holden Dealer's premises. Before employing a towing company, contact the nearest Holden Dealer and / or Holden Customer Assistance Service (refer to further on in this chapter) to obtain guidance.

Q 8. Would my vehicle's engine benefit from fuel additives, oil additives or coolant additives not marketed by Holden?

The use of break-in oil, tune-up compounds, friction-reducing compounds and other supplemental additives is not recommended; their use will not only increase operating costs, but may also be detrimental to the operation of your vehicle and may affect the validity of your New Vehicle Warranty.

Only the fluids and lubricants referred to in this handbook should be used.

UNAUTHORISED STATEMENTS IN RELATION TO HOLDEN PRODUCTS

No Holden Dealer or other person is authorised or permitted to give or make any statement, assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any Holden product or in connection with the supply of any Holden product, which is at variance with any written statement, assertion or undertaking on any of these subjects given or made by Holden in its published sales literature, and Holden does not accept any responsibility for such unauthorised action.

CHAPTER

10

Tow and Load

Page

10-2 Loading the vehicle

10-5 Towing

10-6 Safe towing tips

LOADING THE VEHICLE

Notes on loading the vehicle

- *Loads should not protrude above the upper edge of the rear seat backrests or, if the rear seat backrests are folded down, above the upper edge of the front seat backrests.*
- *Heavy objects should be secured with lashing straps (if fitted). If heavy loads slip when the vehicle is braked heavily or when cornering, the handling of the vehicle may change significantly.*
- *No object should be placed in front of the rear window or on the instrument panel. They can reflect in the glass, obstruct the driver's view and can be thrown in the event of heavy braking or an accident, risking injury to occupants.*
- *Bulky objects should not be transported with the boot / tailgate open or ajar; poisonous exhaust fumes may enter the vehicle and the number plate is only clearly readable and lit correctly when the boot / tailgate is closed.*
- *Driving with a roof load increases the sensitivity of the vehicle to cross-winds and affects vehicle handling owing to the higher centre of gravity of the vehicle.*
- *Do not place object/s in the areas that airbags inflate. The object could cause injury if the airbags are triggered.*
- *Overloading is a safety hazard and can shorten the life of your vehicle or its parts.*

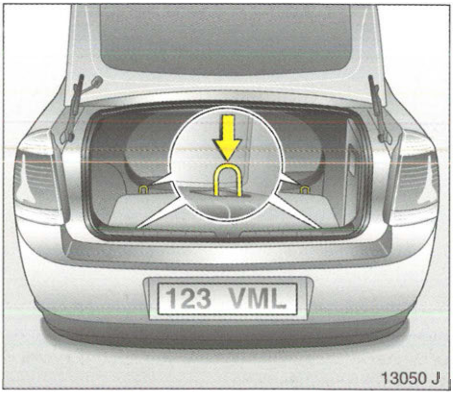
Lashing eyes (if fitted)

Lashing eyes are located in the luggage compartment, as illustrated. Use these to secure cargo (heavy objects for example).

WARNING:

The recommended carrying capacity of your vehicle is 408 kg (including five occupants and luggage).

If you load your vehicle over the above recommendations, ensure that the maximum rear and front axle loads are not exceeded.



LOADING THE VEHICLE cont.

Kerb weights and axle loads

- *The kerb weights shown below are for the weight of an unloaded vehicle without any options and with a full tank of fuel.*
- *When loading the vehicle, do not exceed the maximum allowable axle loads shown below.*
- *Remember to include the tow ball load and roof rack load when determining the rear axle load. For the tow ball load, refer to Towing in this chapter.*

If unsure, have the vehicle weighed at a weighbridge.

WEIGHT (in kg)	CD						CDX	CDXi	
	Sedan		Hatch		Sedan	Hatch	Hatch	Hatch	
Engine	2.2		2.2		3.2		3.2	3.2	
Transmission	man	auto	man	auto	auto	auto	auto	man	auto
Kerb	1391	1421	1406	1436	1491	1506	1527	1506	1531
Max front axle load	995	1025	995	1025	1095	1095	1095	1065	1095
Max rear axle load	960	960	980	980	980	980	980	980	980

Note: *The vehicle weights listed are estimates based on pre-production vehicles and although correct at the time of printing, are subject to change. When the actual weight of a particular vehicle is required, it is recommended that the vehicle be weighed on a suitable weighbridge.*

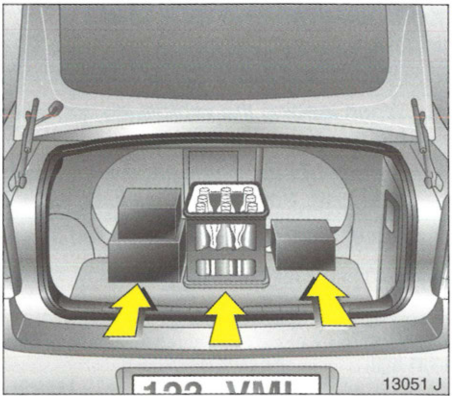
LOADING THE VEHICLE cont.

Heavy objects

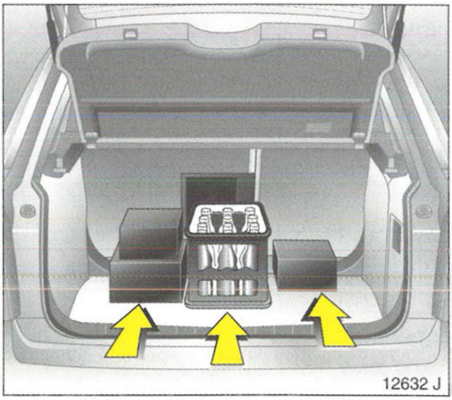
Place heavy objects in the load compartment as far forward as possible against the rear seat backrests. If the rear seat-backs are folded down, the objects should be placed against the front seat backrests. Refer to Chapter 3 for adjustment of the rear seat seat-backs.

When stacking objects, place heavier objects at the bottom.

Note: *Unsecured objects in the luggage / load compartment can be thrown forward with great force during heavy braking or in an accident.*



Sedan



Hatch

Gas cylinders

WARNING:

Gas cylinders can leak, creating a risk of fire or explosion. As a precaution, ensure adequate ventilation when carrying gas cylinders. They must be restrained from rolling around, and where possible, placed in the load area of the vehicle. It is recommended that if gas cylinders are frequently transported that a purpose built carrying compartment be used. Transportation of gas cylinders is regulated by legislation in some states.

Roof rack loads

For safety reasons and to avoid damaging the roof, use only the Holden approved root rack for your vehicle. Distribute the load evenly and secure it tightly with straps so that it cannot slip.

WARNING:

The maximum allowable roof load is 100 kg (loaded onto the roof rack).

Roof rack loads alter the handling of a vehicle due to a change in the centre of gravity. When carrying loads on the roof rack, avoid abrupt swerving or sharp steering. The weight on the roof must be included when working out the maximum axle loads; treat the roof load as luggage.

TOWING

Your vehicle is designed primarily as a passenger vehicle, so handling, durability and economy may be affected by towing a caravan or trailer. Before attempting any towing, ensure that the correct equipment is fitted.

Engine	2.2 4CYL (Z 22 SE)		3.2 V6 (Z 32 SE)	
	Trailer brakes fitted	Trailer brakes not fitted	Trailer brakes fitted	Trailer brakes not fitted
Towing capacity	1500 kg	715 kg	1600 kg	750 kg

In higher elevations and / or mountainous terrain, reduce the maximum towing and loading limits.

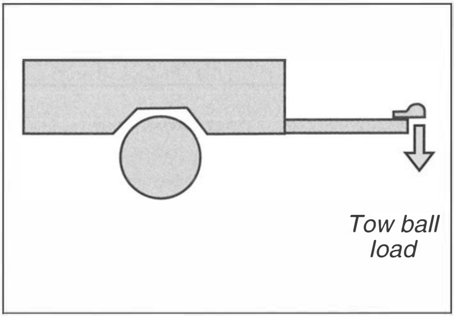
Note: *Holden towing equipment is recommended where it is available. Where it is not available, no recommendation is made as to the make of equipment which should be used. Holden will not accept liability for defects occurring in towing equipment not marketed by Holden or for defects in the vehicle arising from the use of such equipment or for loss or injury caused by use of such equipment. The use of such equipment may void your New Vehicle Warranty to the extent that Holden considers the non-recommended equipment affects the specifications or quality of your Holden vehicle.*

Tow ball load

The tow ball load is the static weight on the tow ball and the tow bar.

Ideally, the tow ball load should be 10% of the loaded trailer / caravan weight. This can be corrected by adjusting the location of the contents in the trailer / caravan (by moving items forwards or backwards within the trailer / caravan).

If the ball load is too light or too heavy, the steering and handling of the vehicle is affected.



The load on the tow ball should be included as luggage weight when working out the load your vehicle is carrying.

If the vehicle is fully loaded before hitching the trailer / caravan, some luggage may need to be moved from the vehicle to the trailer / caravan to achieve the correct tow ball load.

When measuring the tow ball load (a public weighbridge is suggested), make sure that the drawbar of the loaded trailer / caravan is at the same height as it will be when the trailer / caravan is mounted on the vehicle. This is particularly important for trailer / caravans with tandem axles.

SAFE TOWING TIPS

- *Your vehicle will handle differently when towing. It is a good idea to make a couple of short distance trips with the trailer / caravan before you set off on a long trip.*
- *Have your vehicle correctly maintained and serviced.*
- *Have your trailer / caravan maintained and serviced with particular attention given to the condition of the brakes, tyres, suspension, wheel bearings, towing coupling and lighting.*
- *Have an extended-arm mirror fitted on both sides of your vehicle.*
- *Headlight aim may need adjusting after the load has been hitched, particularly if a load equalising hitch is not used.*
- *When descending steep hills, use a lower gear rather than your brakes.*
- *If your trailer / caravan moves off the road behind you, allow the left wheels of your vehicle to move off as well. When it is safe to do so, carefully steer back on to the road. A sudden attempt to steer back on to the road could make you swerve dangerously.*
- *When towing, do not exceed 80 km/h.*
- *When heavily loading your vehicle or when towing, inflate your tyres to the maximum recommended pressure. Refer to Chapter 7 for information about tyre pressure, Chapter 8 for the tyre placard location and Chapter 4 for information about driving with increased vehicle loads.*
- *Secure loads so that they cannot slip and place them in the centre of the trailer / caravan if possible, that is, above the axle.*
- *Trailer brakes are recommended on trailers / caravans which weigh over 500 kg when loaded.*
- *The brakes on the trailer / caravan must be designed to cope with the braking requirements under all towing conditions without adversely affecting the brakes on the vehicle.*
- *Make sure that you have enough room when cornering and avoid sudden manoeuvres.*
- *In the case of trailers / caravans with low directional stability, it is advisable to use a stabiliser to dampen the rolling motion.*
- *The cooling fan is driven electrically and so is not dependant on engine speed. At high engine speeds a lot of heat is produced and at low engine speeds correspondingly less heat is produced. For this reason, when driving uphill, do not shift down into a lower gear (which will increase engine speed) whenever the vehicle can still climb the hill in the higher gear.*
- *Whenever a tow bar is removed, be certain to have any mounting holes in the vehicle underbody properly sealed to prevent the possible entry of exhaust fumes, dust and water.*
- *Ensure that the tow bar does not obscure the rear licence plate. If necessary, remove the tow bar tongue when it is not required for towing.*
- *If starting off on hills in a vehicle with manual transmission, the most favourable engine speed is between 2000 and 3000 rpm.*

Notes

CHAPTER 11

Cleaning

Page

11-2 Interior cleaning

11-4 Caring for paint

11-6 Paint polishing

11-6 Wheels and tyres

11-7 Exterior glass cleaning

11-9 Holden cleaning products

INTERIOR CLEANING

WARNING:

Many cleaners may be toxic, flammable or may damage the interior. When cleaning the interior, avoid volatile cleaners such as: acetone, lacquer thinners, enamel reducers, nail polish removers, or cleaners such as laundry soaps, bleaches or reducing agents. Never use carbon tetrachloride, gasoline or naphtha for any cleaning purpose. Be sure the vehicle is well ventilated while using any cleaners and always follow the cleaning manufacturer's recommendations.

Care and cleaning of upholstery

Dust and dirt accumulates on upholstery and should be removed with a vacuum cleaner every few weeks; more often with constant driving.

Before attempting to remove spots and stains, it is necessary to determine:

- *the type of fabric*
- *the nature and age of the stain*
- *the effect of the stain removal agent upon the colour, structure and general appearance of the upholstery.*

Remove stains as soon as possible. If they are allowed to remain on the fabric for any length of time, they very often become oxidised or set and removal becomes difficult, if not impossible.

Cleaning Vinyl (PVC) coated fabrics

PVC-coated fabrics are used for seating and auxiliary trimming. Fabric grades vary according to their function. PVC fabrics are generally made by coating fabric with synthetic resins. Care of PVC fabric is relatively simple, but important. Wipe over the surface with a dry cloth during the regular cleaning of the vehicle.

Should dirt accumulate and become embedded in the material pattern, the following procedure is recommended.

1. *Using lukewarm water and soap or Holden Velour Fabric and Vinyl Cleaner, work up thick suds on a piece of cheesecloth and apply to the surface. A soft bristle brush can be used to remove stubborn stains or dirt embedded in the grain of the material.*
2. *Repeat using only a damp cloth and no soap.*
3. *Wipe dry with a soft cloth. The above cleaning instructions also apply to the rubber floor mats.*

Cleaning leather trim (if fitted)

To remove surface dust and grit, regularly wipe the leather with 'Softly' (or a similar mild detergent) diluted in warm water using a soft cloth or sponge.

Clean leather every 3 months with Holden Leather Cleaner or a mild saddle soap and a damp soft cloth to remove in-ground dirt which is not visible. Allow leather to dry naturally and apply Holden Leather Protector or a colourless beeswax dressing.

To revitalise the leather upholstery use Holden Leather Revitaliser.

INTERIOR CLEANING cont.

Cleaning cloth trim

To clean seats upholstered with cloth, observe the following instructions.

- *Remove loose dirt and dust with a vacuum cleaner or soft brush.*
- *Do not use a whisk broom or a coarse hair brush.*
- *If normal soiling takes place, it is recommended that the fabric be cleaned with Holden Velour Fabric and Vinyl Cleaner.*

Vehicles with airbags

Use only a dry cloth or mild cleaner to clean the steering wheel and instrument panel. Do not use any aggressive cleaning agents.

Cleaning carpet

Thoroughly brush or vacuum the carpet. In many instances the carpet requires no further cleaning. If the carpet is extremely soiled, thoroughly vacuum it to remove loose dirt then, using Holden Velour Fabric and Vinyl Cleaner, clean approximately one square foot at a time. After each area is cleaned, remove as much of the cleaner as possible with a vacuum cleaner.

Cleaning seat belts

Clean seat belts with a mild non-abrasive soap and lukewarm water. After washing, thoroughly sponge the soap out of the belts.

WARNING:

Do not bleach or dye seat belts as this can severely weaken them.

Cleaning interior glass

Clean the interior glass area of the vehicle with Holden Glass Cleaner and a clean soft cloth. Take care not to damage the demister when cleaning inside the rear window.

Never use abrasive cleaners on any vehicle glass, as they may cause scratches.

CARING FOR PAINT

To help preserve your vehicle's new finish, give special attention to treating those conditions that can damage the paint. Conditions include:

Road bloom: *Oils, dirt, exhaust and other pollutants may combine to affect the paint finish if they are allowed to build up over a long period of time.*

Etching: *Tree sap, bird droppings, salt water and other natural deposits can leave etching or scarring if allowed to stay on the paint.*

Pitting: *Tar spots and some industrial fallout can react chemically and may cause pitting to the surface of the paint.*

Paint inspection

Regularly inspect the vehicle for scratch marks, cracks or damaged areas, all of which could develop rust. Repair any deep scratches, cracks or breakdown in the finish immediately.

Take care to ensure any rust is repaired immediately otherwise rust 'creep' will extend beyond the damaged area. This occurs particularly in tropical or coastal areas, where the moist or salt-laden air accelerates rusting.

The paint finish of the vehicle gives a very high degree of protection against the weather, but be aware that wear and deterioration occurs when the vehicle is exposed to the elements for prolonged periods.

Park the vehicle in a garage whenever possible.

To prevent damage of the paint surface, remove foreign matter immediately. Foreign matter such as bird droppings should be removed within 24 hours due to the acidity.

Washing your vehicle

The easiest way to keep the paint looking as new is to keep it clean. A wash once a week will keep your vehicle in good condition. However, it must be washed correctly.

Note:

- *Never use an automatic wash that requires anything touching the paint (other than water).*
- *Wash your vehicle once a week to remove build up of any grime on the paint.*
- *Never wash your vehicle in direct sunlight; find a shady spot to wash your vehicle.*

1. *Wet the vehicle thoroughly from top to bottom with plenty of cold water (in accordance with current water restrictions, if any). This removes any grit or other loose particles and substances. Do not use a sponge or cloth at this stage.*
2. *Fill a bucket with lukewarm water and add no more than 2 capsful of gentle detergent. Do not use hot water, strong soap or chemical detergents.*
3. *To remove bird droppings, soak the area with a wet sponge for several minutes before washing off. If this does not work, use a solution of 1 litre of water and 110 grams of dissolved baking soda (bicarbonate of soda). Rinse with clean water.*
4. *Starting with the roof, use a clean sponge to clean a small section at a time. Do not allow liquid to dry before rinsing it off with clean water. When you have completed each section, rinse the whole vehicle again with cold water.*
5. *Dry the clean vehicle thoroughly with a good quality chamois.*

CARING FOR PAINT cont.

WARNING:

Take care when moving the vehicle after washing, in case water has affected the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with a clear area ahead, until brake performance returns to normal.

Removing stains, such as grease, oil and tar spots

Washing your vehicle regularly ensures most harmful substances deposited on the paint are removed before they can cause permanent damage. However, some substances are difficult to remove. If you notice stains on the paint, ensure you remove them at the earliest possible opportunity.

Grease, oil, and even fresh tar can be removed from the paint with a little kerosene or turpentine. As a precaution against staining, wash and polish the area as soon as possible after the stain has been removed.

A rubbing or cutting compound can be used after a normal wash. Do not do this on a regular basis as it removes paint.

WARNING:

- **Some chemical cleaners used for removing road oils and tars from painted surfaces are detrimental to automotive paint.**
- **If petrol is spilt on the paint when refilling, flush it off immediately with clean water, as petrol has a tendency to stain or soften new paint finish during the weathering out period, particularly when the vehicle is exposed to high temperatures.**
- **Do not use petrol to clean any painted or plastic surfaces.**

Ventilation system intake

The intake area between the bonnet and windscreen may collect leaves, which impairs air flow into the vehicle. Clear this area of debris whenever you wash your vehicle.

Under vehicle washing

Your vehicle has a factory-applied PVC undercoating in the wheel arches (including longitudinal members) which provides permanent protection and needs no special maintenance.

The surfaces of the vehicle underside not covered by PVC are provided with a durable protective wax coating. Once a year, preferably before the start of the cold season, check the wax coating and PVC coating and if necessary, have it restored to perfect condition.

Commercial bitumen and rubber materials can damage PVC coating. Have all work on the underbody performed by a Holden Retailer, as it requires knowledge of the specified materials and experience concerning their application.

Wash the underbody following the end of the cold weather season to remove any dirt adhering to the underbody, since this may also contain salt.

PAINT POLISHING, WHEELS AND TYRES

Polishing

Under normal circumstances the paint does not need polishing to retain its shine; a weekly wash is sufficient. However, the use of a Polymer Glaze approximately every 3 months reduces the effects of road bloom by removing natural contaminants that can build up on the paint.

Note: *Do not attempt to apply a polish without first washing the vehicle to remove loose grit, surface dirt, dust and grease.*

Tyres

Sponging with cold water is sufficient for normal tyre cleaning. Oil and grease should be removed with soap and water or detergent. For tar or other substances, use a mild abrasive, such as mechanic's hand soap or kitchen cleaning powder. Thoroughly rinse the tyres. Do not use petrol to clean tyres.

Original or 'new' tyre look can be restored using Holden Tyre and Bumper Shine.

Alloy wheels

To preserve the original appearance of alloy wheels, keep them clean and free from road dirt. Use Holden Wheel Cleaner for cleaning alloy wheels. Do not use abrasive cleaners on alloy wheels.

EXTERIOR GLASS CLEANING

Glass cleaning

Avoid scratching the glass. If the glass is cleaned at the same time as the rest of the vehicle, particles of grit may cause fine scratches. Flush off any mud on the glass when washing the body, but leave the final cleaning and polishing until afterwards.

Use Holden Glass Cleaner and wash each section of the glass in turn, making sure that the water, its container and the sponge are clean and free from grit. Old linen cloth is better than new material for polishing glass.

Windscreen

Always keep the windscreen clean so the wiper blades are as effective as possible. Old wiper blades can cause scratches and should be regularly inspected and replaced if necessary.

Never use abrasive cleaners to clean glass as they can cause scratches, impairing night vision. After the windscreen has been cleaned with a wet sponge wipe it with a soft, lint free cloth or chamois.

It is recommended that Holden Optikleen be added to the windscreen washer reservoir.

Wiper blades

Oil and road scum thrown up on the windscreen will cause smearing when the wipers are switched on. Many owners do not clean the wiper blades, despite cleaning the windscreen. Consequently, the smearing of the glass reappears as soon as the wiper blades are next used, as dirt accumulates in the blades.

Clean the blades by lifting them off the windscreen and cleaning with Holden Optikleen and a clean cloth.

Note: *Do not operate the wiper blades by hand as this may damage the wiper drive mechanism.*

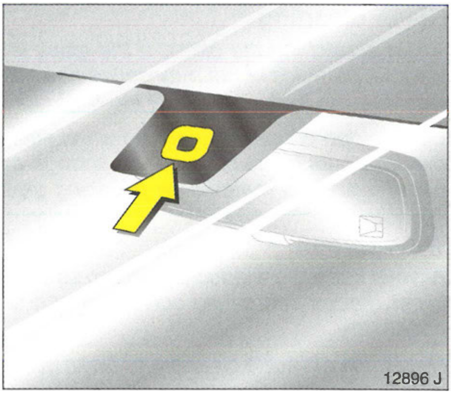
If using the wiper blades to clean dust and dirt from the windscreen in dry conditions, always use the washer system first to wet the windscreen. Ensure that the windscreen washer reservoir is not empty.

Should the wiper blades freeze to the windscreen, lift them off by hand before switching on the wipers.

EXTERIOR GLASS CLEANING cont.

Automatic rain sensor (if fitted)

To ensure correct operation of the rain sensor, the sensor area must be kept clean. The sensor is located near the top of the windscreen.



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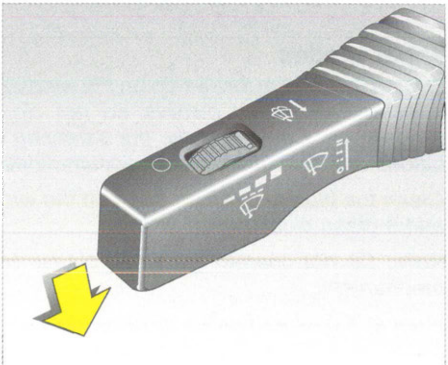
Service setting for front wipers

Use this setting when cleaning or replacing the windscreen wipers.

Within eight seconds of switching off the ignition, push the windscreen wiper lever downwards. Release the lever as soon as the wipers are vertical.

To return the wipers to the horizontal position, turn the ignition on and repeat this procedure.



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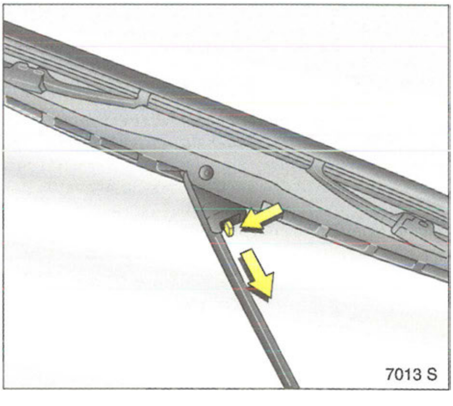
Remove wiper blades

With the windscreen wipers in the service setting, lift the wiper off the windscreen, release and slide the wiper blade out of the housing.

To remove the blade housing, press the release lever as illustrated.



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HOLDEN CLEANING PRODUCTS

PART NUMBER	SIZE	DESCRIPTION	USAGE
92145132	237 ml	Quick and Easy Speed Finish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
92145418	437 ml	Quick and Easy Speed Finish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
92145130	237 ml	All Purpose Cleaner	Cleans and deodorises velour, most vinyl upholstery, hood linings, mats and carpets, etc.
92145416	437 ml	All Purpose Cleaner	Cleans and deodorises velour, most vinyl upholstery, hood linings, mats and carpets, etc.
92145133	237 ml	Glass Cleaner	Cleans all glass surfaces.
92145419	437 ml	Glass Cleaner	Cleans all glass surfaces.
92140005	500 ml	Optikleen	Windscreen washer solvent.
92140004	5 ml	Optikleen Sachet	Windscreen washer solvent; 1 sachett per washer bottle refill.
92145129	237 ml	Hi Suds Car Wash	Cleans vehicle exterior.
92145415	437 ml	Hi Suds Car Wash	Cleans vehicle exterior.
92145131	237 ml	Vinyl and Trim Dressing	Seals and protects vinyl upholstery and plastic trim.
92145417	437 ml	Vinyl and Trim Dressing	Seals and protects vinyl upholstery and plastic trim.
92145140	120 ml	Leather Revitaliser	Revitalises the leather upholstery.
92145141	120 ml	Leather Cleaner	Cleans the leather upholstery.
92145142	120 ml	Leather Protector	Protects the leather upholstery.
92145143	1 Kit	Leather Care Kit	Contains leather revitaliser, cleaner and protector.
92145135		Chamois	Cloth for wiping off excess water from the vehicle's exterior after washing and rinsing.
92145134		Handle Grip Sponge	Sponge for washing the vehicle.
92145136		Microfibre Glass Cleaning Cloth	Cloth for cleaning all glass surfaces.
92145137		Microfibe General Purpose Cleaning / Polishing Cloth	Cloth for general purpose cleaning / polishing.

CHAPTER 12

Servicing

Page

12-2 Service intervals

12-3 Additional service requirements

12-5 Maintenance Schedule

12-7 Service coupons

SERVICE INTERVALS

When it comes to service, remember that your Holden Retailer has the trained personnel and specialised equipment to correctly service your vehicle. Your Retailer invites you to return for all your service needs both during and after the New Vehicle Warranty period.

The safety, economy, emission control, performance and reliability of your vehicle cannot be assured unless regular maintenance is performed, preferably by factory-trained technicians at Holden Retailers.

Therefore, it is in the owner's interest that the following services are performed at the specified distance or time duration (whichever occurs first).

1 500 km – 1 month inspection
15 000 km – 1 year
30 000 km – 2 years
45 000 km – 3 years
60 000 km – 4 years
75 000 km – 5 years
90 000 km – 6 years
105 000 km – 7 years
120 000 km – 8 years
135 000 km – 9 years
150 000 km – 10 years
165 000 km – 11 years
180 000 km – 12 years

The 1 month / 1500 km inspection will be performed without cost for labour by the Selling Retailer.

This service may be carried out by another Holden Retailer provided you have a letter of introduction from the Selling Retailer .

The Selling Retailer will supply the necessary letter of introduction upon request.

The services shown in this schedule between 15 000 km and 180 000 km are to be performed after 180 000 km at the same intervals.

Note: *All maintenance services as listed in this handbook and replacement of service items are the responsibility of the owner and as such are not considered, under the provisions of the New Vehicle Warranty to be rectification of defective material and workmanship. Items such as wheel alignment, necessary adjustments to drive belts, transmission, clutch, park brake or any other items which may require servicing due to fair wear and tear will be carried out at the owner's cost.*

Damage caused by failure to have proper maintenance services carried out by an authorised Holden Retailer or authorised Service Outlet or in accordance with Holden's specifications, may void your New Vehicle Warranty. It is strongly recommended that you read the New Vehicle Warranty in Chapter 9 so that you are aware of your Warranty exclusions.

Service coupons are provided further on in this chapter. When each service is performed, the coupon is removed so that the following service coupon is readily visible to remind you when the next service is due.

After the service is completed, check that the service has been validated by the Retailer stamping and signing the coupon stub. This will not only assist in the determination of warranty claims, but enhance the value of the vehicle when selling.

ADDITIONAL SERVICE REQUIREMENTS

If your vehicle operates under any of the conditions listed in the table following, it is recommended that some items be serviced more frequently than the intervals specified in the Maintenance Schedule.

Note: *The extra services shown in the table only need to be used if your vehicle operates continuously in that condition.*

If you drive under any of these conditions on a one off basis, for example a holiday trip, then an extra service should be performed for that period only.

As a guide, if you operate the vehicle continually for a period of one month or 1000 km under any of the conditions, then Holden recommends additional services.

If at any time it is considered that the above items or other items should be more frequently serviced due to the type of operation or before a long trip, discuss the situation with the service manager of your Holden Retailer.

Change automatic transmission fluid @ 60 000km or 4 years (whichever comes first)	**A**	**B**	**C**
Replace engine oil and filter @ 5000km or 3 months (whichever comes first)	**A**		

A = Stop-start driving, excessive idling or low speed operation as experienced in inner city driving, for example taxi, police, door to door delivery.

B = Caravan or trailer towing.

C = Extended heavy-load, high-speed operation in temperatures above 35°C.

ADDITIONAL SERVICE REQUIREMENTS cont.

SPECIAL SERVICE FOR ADDITIONAL SERVICE REQUIREMENTS

Date .... km ....

Items performed ....

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....

....

Servicing
Retailer ....

SPECIAL SERVICE FOR ADDITIONAL SERVICE REQUIREMENTS

Date .... km ....

Items performed ....

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Servicing
Retailer ....

SPECIAL SERVICE FOR ADDITIONAL SERVICE REQUIREMENTS

Date .... km ....

Items performed ....

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Servicing
Retailer ....

SPECIAL SERVICE FOR ADDITIONAL SERVICE REQUIREMENTS

Date .... km ....

Items performed ....

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Servicing
Retailer ....

SPECIAL SERVICE FOR ADDITIONAL SERVICE REQUIREMENTS

Date .... km ....

Items performed ....

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Servicing
Retailer ....

SPECIAL SERVICE FOR ADDITIONAL SERVICE REQUIREMENTS

Date .... km ....

Items performed ....

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Servicing
Retailer ....

MAINTENANCE SCHEDULE

Use odometer reading or years, whichever occurs first	x 1000 km	1.5	15	30	45	60	75	90	105	120	135	150	165	180
	or years	1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE ITEMS														
Indicators, lights, signalling devices and airbag – check visually		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Batteries, remote control (including the spare key) – replace				2		4		6		8		10		12
Windscreen wipers and washer system – check, correct		1/12	1	2	3	4	5	6	7	8	9	10	11	12
COOLANT – check level, check coolant %		1/12	1	2	3	4		6	7	8	9		11	12
COOLANT – replace							5					10		
Battery terminals – check securely connected		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Pollen filter – replace				2		4		6		8		10		12
Air cleaner element – replace						4				8				12
Spark plugs – replace										8				
Drive belts – check			1	2	3	4	5	6	7	8	9	10	11	12
3.2 L engine: ENGINE TOOTHED BELT, TENSIONER ASSEMBLY, IDLER PULLEY AND RETURN ROLLER - replace										8				
3.2L engine: ENGINE TOOTHED BELT CRANK DRIVE GEAR - inspect										8				
Power steering – check level visually for leaks, check correct oil level		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Engine oil and oil filter – change			1	2	3	4	5	6	7	8	9	10	11	12
Fuel filter – replace						4				8				12
Park brake – check, adjust (wheels under no load): wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system – check visually		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Outer body / underbody – corrosion protection – check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Front / rear wheel brakes – check visually (brake pads)			1	2	3	4	5	6	7	8	9	10	11	12
Automatic transmission – check fluid level				2		4		6		8		10		12

MAINTENANCE SCHEDULE cont.

Use odometer reading or years, whichever occurs first	x 1000 km	1.5	15	30	45	60	75	90	105	120	135	150	165	180
	or years	1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE ITEMS														
AUTO TRANSMISSION – fluid change		Fluid not changed under normal conditions. Refer to page 12-3												
Engine, transmission (MT, AT), AC compressor, rear differential – check for leakage		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Rubber boots – check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Brake / clutch fluid – change		Change every 2 years (regardless of km)												
Wheel attachment – loosen and tighten to torque 110 Nm; tyre condition – check: inflation pressure (including sprare wheel) – check, correct		1/12	1	2	3	4	5	6	7	8	9	10	11	12
Headlight aiming – check, correct			1	2	3	4	5	6	7	8	9	10	11	12
Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate			1	2	3	4	5	6	7	8	9	10	11	12
ROAD TEST and reset service due light		1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE LABOUR TIMES														
If 2.2 litre engine fitted		–	1.4	1.6	1.4	1.9	1.7	1.6	1.4	1.9	1.4	1.9	1.4	1.9
If 3.2 litre engine fitted		–	1.4	1.6	1.4	1.9	1.7	1.6	1.4	4.6	1.4	1.9	1.4	1.9

- *The owner will be charged for all lubricants and materials used plus labour at the times recommended above.*
- *The repair or replacement of any part found faulty during a service check and not covered by the Holden warranty will be added to the charges.*
- *Where any deficiencies are noted, such items should be reported to the owner / operator so that the extra work required can be authorised.*
- *The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended; their use will not only increase operating costs, but may indeed be harmful to your vehicle.*

1500 km
or 1 month
INSPECTION

Holden invites the new owner of this vehicle to return to the selling Retailer for a free service inspection at 1500 km.

Mr.
Owner's Name *Mrs.* ....
Miss.
Other...........

Address ....

Town ....

State .... *Postcode* ....

Reg. no. .... *Engine no* ....

ISOVIN... *Model* ....

Odometer reading .... *Date of Acquisition* ....

Selling Retailer's Stamp and Signature ....

This vehicle has been thoroughly checked in accordance with the items on the reverse side of this voucher.

This inspection is provided free of charge.

Servicing Retailer's Stamp and Signature

Servicing Retailer ....

Town .... *State* ....

Owner's signature ....

1500 km or 1 month Inspection Validation

This vehicle has been thoroughly checked in accordance with the 1500 km / one month inspection.

Retailer ....

Service Manager's signature ....

Date .... *Odometer reading* ....

☐ *Indicators, lights, signalling devices and airbag – check visually*

☐ *Windscreen wipers and washer system – check, correct*

☐ *Coolant – check level and check %*

☐ *Battery terminals – check securely connected*

☐ *Power steering – check system for leaks*

☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*

☐ *Outer body / underbody – corrosion protection check*

☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*

☐ *Rubber boots – check*

☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*

☐ *Road test*

15 000 km or 1 year Service Validation

Servicing Retailer .... Additional services performed: ....

Brake / clutch fluid changed: YES / NO ....

Date of Service ....

Odometer ....

Signed ....

15 000 km
or
1 year

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.4 hours*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

- ☐ *Indicators, lights, signalling devices and airbag – check visually*
- ☐ *Windscreen wipers and washer system – check, correct*
- ☐ *Coolant – check level and check %*
- ☐ *Battery terminals – check securely connected*
- ☐ *Drive belts – check*
- ☐ *Power steering – check system for leaks*
- ☐ *Engine oil and oil filter – change*
- ☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*
- ☐ *Outer body / underbody – corrosion protection check*
- ☐ *Front / rear wheel brakes – check visually (brake pads)*
- ☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*
- ☐ *Rubber boots – check*
- ☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*
- ☐ *Headlight aiming – check, correct*
- ☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*
- ☐ *Road test and reset service due light*

30 000 km or 2 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.6 hours*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

---

30 000 km or
2 year
Service
Validation

Servicing Retailer ....
Brake / clutch fluid changed: YES / NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

- ☐ *Indicators, lights, signalling devices and airbag – check visually*
- ☐ *Batteries, remote control (including the spare key) – replace*
- ☐ *Windscreen wipers and washer system – check, correct*
- ☐ *Coolant – check level and check %*
- ☐ *Battery terminals – check securely connected*
- ☐ *Pollen filter – replace*
- ☐ *Drive belts – check*
- ☐ *Power steering – check system for leaks*
- ☐ *Engine oil and oil filter – change*
- ☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*
- ☐ *Outer body / underbody – corrosion protection check*
- ☐ *Front / rear wheel brakes – check visually (brake pads)*
- ☐ *Automatic transmission – check fluid level*
- ☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*
- ☐ *Rubber boots – check*
- ☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*
- ☐ *Headlight aiming – check, correct*
- ☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*
- ☐ *Road test and reset service due light*

- ☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

45 000 km or
3 years
Service
Validation

Servicing Retailer ....
Brake / clutch fluid changed: YES / NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

45 000 km or 3 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.4 hours*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

- ☐ *Indicators, lights, signalling devices and airbag – check visually*
- ☐ *Windscreen wipers and washer system – check, correct*
- ☐ *Coolant – check level and check %*
- ☐ *Battery terminals – check securely connected*
- ☐ *Drive belts – check*
- ☐ *Power steering – check level visually for leaks, check correct oil level*
- ☐ *Engine oil and oil filter – change*
- ☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*
- ☐ *Outer body / underbody – corrosion protection check*
- ☐ *Front / rear wheel brakes – check visually (brake pads)*
- ☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*
- ☐ *Rubber boots – check*
- ☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*
- ☐ *Headlight aiming – check, correct*
- ☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*
- ☐ *Road test and reset service due light*

- ☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

60 000 km or
4 years
Service
Validation

Servicing Retailer ....
Brake / clutch fluid changed: YES / NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

60 000 km or 4 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.9 hours*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

- ☐ *Indicators, lights, signalling devices and airbag – check visually*
- ☐ *Batteries, remote control (including the spare key) – replace*
- ☐ *Windscreen wipers and washer system – check, correct*
- ☐ *Coolant – check level and check %*
- ☐ *Battery terminals – check securely connected*
- ☐ *Pollen filter – replace*
- ☐ *Air cleaner element – replace*
- ☐ *Spark plugs – replace*
- ☐ *Drive belts – check*
- ☐ *Power steering – check system for leaks*
- ☐ *Engine oil and oil filter – change*
- ☐ *Fuel filter – replace*
- ☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*
- ☐ *Outer body / underbody – corrosion protection check*
- ☐ *Front / rear wheel brakes – check visually (brake pads)*
- ☐ *Automatic transmission – check fluid level*
- ☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*
- ☐ *Rubber boots – check*
- ☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*
- ☐ *Headlight aiming – check, correct*
- ☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*
- ☐ *Road test and reset service due light*

- ☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

75 000 km or
5 years
Service
Validation

Servicing Retailer .... *Additional services performed:* ....
Brake / clutch fluid changed: YES / NO ....
Date of Service ....
Odometer ....
Signed ....

---

75 000 km
or
5 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.7 hours*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

- ☐ *Indicators, lights, signalling devices and airbag – check visually*
- ☐ *Windscreen wipers and washer system – check, correct*
- ☐ *Coolant – replace*
- ☐ *Battery terminals – check securely connected*
- ☐ *Drive belts – check*
- ☐ *Power steering – check system for leaks*
- ☐ *Engine oil and oil filter – change*
- ☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*
- ☐ *Outer body / underbody – corrosion protection check*
- ☐ *Front / rear wheel brakes – check visually (brake pads)*
- ☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*
- ☐ *Rubber boots – check*
- ☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*
- ☐ *Headlight aiming – check, correct*
- ☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*
- ☐ *Road test and reset service due light*

- ☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

90 000 km or 6 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.6 hours*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

---

90 000 km or 6 years Service Validation

Servicing Retailer ....

Brake / clutch fluid changed: YES / NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

- ☐ *Indicators, lights, signalling devices and airbag – check visually*
- ☐ *Batteries, remote control (including the spare key) – replace*
- ☐ *Windscreen wipers and washer system – check, correct*
- ☐ *Coolant – check level and check %*
- ☐ *Battery terminals – check securely connected*
- ☐ *Pollen filter – replace*
- ☐ *Drive belts – check*
- ☐ *Power steering – check system for leaks*
- ☐ *Engine oil and oil filter – change*
- ☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*
- ☐ *Outer body / underbody – corrosion protection check*
- ☐ *Front / rear wheel brakes – check visually (brake pads)*
- ☐ *Automatic transmission – check fluid level*
- ☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*
- ☐ *Rubber boots – check*
- ☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*
- ☐ *Headlight aiming – check, correct*
- ☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*
- ☐ *Road test and reset service due light*

- ☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

105 000 km or 7 years Service Validation

Servicing Retailer ....

Brake / clutch fluid changed: YES / NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

---

105 000 km
or
7 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.4 hours*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ *Indicators, lights, signalling devices and airbag – check visually*

☐ *Windscreen wipers and washer system – check, correct*

☐ *Coolant – check level and check %*

☐ *Battery terminals – check securely connected*

☐ *Drive belts – check*

☐ *Power steering – check system for leaks*

☐ *Engine oil and oil filter – change*

☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*

☐ *Outer body / underbody – corrosion protection check*

☐ *Front / rear wheel brakes – check visually (brake pads)*

☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*

☐ *Rubber boots – check*

☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*

☐ *Headlight aiming – check, correct*

☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*

☐ *Road test and reset service due light*

☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

120 000 km or
8 years
Service
Validation

Servicing Retailer .... Additional services performed: ....

Brake / clutch fluid changed: YES / NO ....

Date of Service ....

Odometer ....

Signed ....

120 000 km or 8 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.9 hours (if 2.2 litre engine fitted)*
- *4.6 hours (if 3.2 litre engine fitted)*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

- ☐ *Indicators, lights, signalling devices and airbag – check visually*
- ☐ *Batteries, remote control (including the spare key) – replace*
- ☐ *Windscreen wipers and washer system – check, correct*
- ☐ *Coolant – check level and check %*
- ☐ *Battery terminals – check securely connected*
- ☐ *Pollen filter – replace*
- ☐ *Air cleaner element – replace*
- ☐ *Spark plugs – replace*
- ☐ *Drive belts – check*
- ☐ *3.2 L engine: Engine toothed belt, tensioner assembly, idler pulley and return roller - replace*
- ☐ *3.2 L engine: Engine toothed belt crank drive gear - inspect*
- ☐ *Power steering – check system for leaks*
- ☐ *Engine oil and oil filter – change*
- ☐ *Fuel filter – replace*
- ☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*
- ☐ *Outer body / underbody – corrosion protection check*
- ☐ *Front / rear wheel brakes – check visually (brake pads)*
- ☐ *Automatic transmission – check fluid level*
- ☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*
- ☐ *Rubber boots – check*
- ☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*
- ☐ *Headlight aiming – check, correct*
- ☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*
- ☐ *Road test and reset service due light*

- ☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

135 000 km or 9 years Service Validation

Servicing Retailer .... *Additional services performed:* ....

Brake / clutch fluid changed: YES / NO ....

Date of Service ....

Odometer ....

Signed ....

135 000 km or 9 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.4 hours*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

- ☐ *Indicators, lights, signalling devices and airbag – check visually*
- ☐ *Windscreen wipers and washer system – check, correct*
- ☐ *Coolant – check level and check %*
- ☐ *Battery terminals – check securely connected*
- ☐ *Drive belts – check*
- ☐ *Power steering – check system for leaks*
- ☐ *Engine oil and oil filter – change*
- ☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*
- ☐ *Outer body / underbody – corrosion protection check*
- ☐ *Front / rear wheel brakes – check visually (brake pads)*
- ☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*
- ☐ *Rubber boots – check*
- ☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*
- ☐ *Headlight aiming – check, correct*
- ☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*
- ☐ *Road test and reset service due light*

- ☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

150 000 km or 10 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.9 hours*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

---

150 000 km or 10 years Service Validation

Servicing Retailer ....

Brake / clutch fluid changed: YES / NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

☐ *Indicators, lights, signalling devices and airbag – check visually*

☐ *Batteries, remote control (including the spare key) – replace*

☐ *Windscreen wipers and washer system – check, correct*

☐ *Coolant – replace*

☐ *Battery terminals – check securely connected*

☐ *Pollen filter – replace*

☐ *Drive belts – check*

☐ *Power steering – check system for leaks*

☐ *Engine oil and oil filter – change*

☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*

☐ *Outer body / underbody – corrosion protection check*

☐ *Front / rear wheel brakes – check visually (brake pads)*

☐ *Automatic transmission – check fluid level*

☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*

☐ *Rubber boots – check*

☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*

☐ *Headlight aiming – check, correct*

☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*

☐ *Road test and reset service due light*

☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

165 000 km or
11 years
Service
Validation

Servicing Retailer .... *Additional services performed:* ....

Brake / clutch fluid changed: YES / NO ....

Date of Service ....

Odometer ....

Signed ....

165 000 km
or
11 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.4 hours*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ *Indicators, lights, signalling devices and airbag – check visually*

☐ *Windscreen wipers and washer system – check, correct*

☐ *Coolant – check level and check %*

☐ *Battery terminals – check securely connected*

☐ *Drive belts – check*

☐ *Power steering – check system for leaks*

☐ *Engine oil and oil filter – change*

☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*

☐ *Outer body / underbody – corrosion protection check*

☐ *Front / rear wheel brakes – check visually (brake pads)*

☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*

☐ *Rubber boots – check*

☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*

☐ *Headlight aiming – check, correct*

☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*

☐ *Road test and reset service due light*

☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

180 000 km or
12 years
Service
Validation

Servicing Retailer ....

Brake / clutch fluid changed: YES / NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

180 000 km
or
12 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- *1.9 hours*
- *add 0.2 hours if brake / clutch fluid changed*

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ *Indicators, lights, signalling devices and airbag – check visually*

☐ *Batteries, remote control (including the spare key) – replace*

☐ *Windscreen wipers and washer system – check, correct*

☐ *Coolant – check level and check %*

☐ *Battery terminals – check securely connected*

☐ *Pollen filter – replace*

☐ *Air cleaner element – replace*

☐ *Spark plugs – replace*

☐ *Drive belts – check*

☐ *Power steering – check system for leaks*

☐ *Engine oil and oil filter – change*

☐ *Fuel filter – replace*

☐ *Parking brake – check, adjust: wheel suspension and springing, front and rear, brake pipes, brake pressure hoses, fuel lines and exhaust system (check visually)*

☐ *Outer body / underbody – corrosion protection check*

☐ *Front / rear wheel brakes – check visually (brake pads)*

☐ *Automatic transmission – check fluid level*

☐ *Engine, transmission (MT, AT), AC compressor – check for leakage*

☐ *Rubber boots – check*

☐ *Wheel attachment – re-torque wheel nuts, check tyre condition and tyre pressure (including spare)*

☐ *Headlight aiming – check, correct*

☐ *Door hinges, door stops, lock cylinder, hood release, striker, tailgate hinges – lubricate*

☐ *Road test and reset service due light*

☐ *BRAKE / CLUTCH FLUID – change every 2 years (regardless of km)*

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